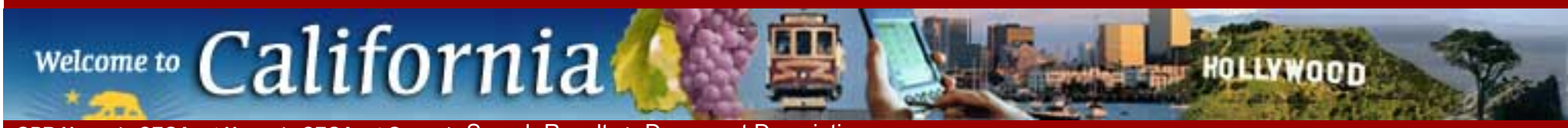

Winters Putah Creek Nature Park / Floodplain Restoration and Recreational Access Project

SCH Number: 2008042018

Document Type: NOD - Notice of Determination

Project Lead Agency: Winters, City of

Project Description

Update to Winters Putah Creek Draft Master Plan and associated environmental enhancement and restoration. The proposed project is divided into two phases, based on the sequencing needed to accomplish the project efficiently. Phase I includes the percolation dam removal; stream recontouring and in-channel structural improvements, including weir construction and bank stabilization; and habitat enhancement based on a vegetation management plan. Phase II includes the development of recreational amenities.

Contact Information

Primary Contact:
Kate Kelly
City of Winters
(530) 902-1615
318 First Street
Winters, CA 95694

Project Location

County: Yolo, Solano
City: Winters
Region:
Cross Streets: Railroad Avenue and I-505 Bridge
Latitude/Longitude: 38° 31' 20.70" / 121° 57' 48.30" Map
Parcel No: Various
Township: 8N
Range: 1W
Section: 21, 22
Base: MDB&M
Other Location Info:

Determinations

This is to advise that the ☒ Lead Agency ☐ Responsible Agency City of Winters has approved the project described above on 6/23/2008 and has made the following determinations regarding the project described above.

1. The project ☐ will ☒ will not have a significant effect on the environment.

2. ☐ An Environmental Impact Report was prepared for this project pursuant to the provisions of CEQA.

   ☒ A Negative Declaration was prepared for this project pursuant to the provisions of CEQA.

3. Mitigation measures ☒ were ☐ were not made a condition of the approval of the project.

4. A Statement of Overriding Considerations ☐ was ☒ was not adopted for this project.

5. Findings ☒ were ☐ were not made pursuant to the provisions of CEQA.

Final EIR Available at: Cit. of Winters 318 First St. Winters CA 95694

Date Received: 12/4/2008

CITY COUNCIL RESOLUTION NO. 2008-23

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF WINTERS ADOPTING THE WINTERS PUTAH CREEK NATURE PARK MASTER PLAN

WHEREAS, the City of Winters adopted a Winters Putah Creek Nature Park Master Plan in 1995; and

WHEREAS, the City established the Winters Putah Creek Committee in October 2006 to advise the City Council on the Winters Putah Creek Nature Park; and

WHEREAS, the City Council approved preparation of an update to the Winters Putah Creek Nature Park Master Plan in January 2007, and hired a Winters Putah Creek Nature Park Master Plan consultant in January 2007 as part of the implementation process; and

WHEREAS, two public workshops where held to solicit input on the Winters Putah Creek Nature Park Master Plan, and the Winters Putah Creek Committee has held extensive meetings to review drafts of the Winters Putah Creek Nature Park Master Plan; and

WHEREAS, the Winters Putah Creek Nature Park Master Plan is a long-range planning document which is to be used in managing the development of the one-mile stretch of the Putah Creek between Railroad Avenue and I-505 from 100 feet north of the top of the north bank and south to Putah Creek Road; and

WHEREAS, the Winters Putah Creek Nature Park Master Plan goals are to integrate the Park into the community fabric, support the City's economic vitality, provide access to a native riparian habitat and improve the ecological vitality of the creek; and

WHEREAS, Winters Putah Creek Nature Park Master Plan includes circulation routes to and through the park, parking areas, conceptual creek realignments, accessible areas, recreational zones, and educational opportunities; and

WHEREAS, the Winters Putah Creek Committee determined that the proposed Winters Putah Creek Nature Park Master Plan adequately addresses the issues, proposed amenities and improvements within the Winters Putah Creek Nature Park and recommended that the City Council adopt the Plan during their meeting on March 10, 2008; and

WHEREAS, an Initial Study/Mitigated Negative Declaration and Mitigation Monitoring Program was prepared and circulated between April 4, 2008 and May 5, 2008; and

WHEREAS, the Planning Commission held a public hearing on May 27th, 2008, took public input, held a discussion, then voted approve the Initial Study/Mitigated Negative Declaration, adopt the Mitigation Monitoring Plan, and to recommend approval of the Winters Putah Creek Nature Park Master Plan by the City Council

WHEREAS, on June 23, 2008, the City Council held a public hearing to receive public participation on the Winters Putah Creek Nature Park Master Plan;

NOW, THEREFORE, BE IT RESOLVED, that the City Council hereby approves and adopts the Winters Putah Creek Nature Park Master Plan.

BE IT FURTHER RESOLVED, that the goals and capital improvement projects outlined in the Winters Putah Creek Nature Park Master Plan will be given full attention in reviews and updates of the General Plan and Zoning for the Putah Creek and downtown area and in budget planning.

PASSED AND ADOPTED at a regular meeting the City of Winters City Council, County of Yolo, State of California, on the 23rd day of June, 2008, by the following roll call vote:

AYES: Council Members Aguiar-Curry, Anderson, Fridae, Stone and Mayor Martin
NOES: None
ABSENT: None
ABSTAIN: None

Michael Martin

Michael Martin, Mayor, City of Winters

ATTEST:

Nancy G. Mills

Nancy G. Mills, City Clerk, City of Winters

INITIAL STUDY
and
MITIGATED NEGATIVE DECLARATION

for
Winters Putah Creek Nature Park /
Floodplain Restoration and Recreational Access Project

Prepared For and Independently Reviewed By:

LEAD AGENCY:
City of Winters
318 First Street
Winters, CA 95694

Preparation Assistance By:

Wallace-Kuhl & Associates, Inc.
3251 Beacon Boulevard, Suite 300
West Sacramento, CA 95691

Lead Agency Contact:
Ms. Kate Kelly
Planning Manager
City of Winters
318 First Street
Winters, California 95694

Initial Study and Mitigated Negative Declaration

WINTERS PUTAH CREEK NATURE PARK FLOODPLAIN RESTORATION AND RECREATIONAL ACCESS PROJECT

Winters, Yolo County, California

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Wallace Kuhl & Associates, Inc.

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Appendix B. Winters Putah Creek Nature Park Accepted Conceptual Master Plan

Appendix C. City of Winters Habitat Mitigation Program

Appendix D. Draft Cultural Resource Investigation for the Solano County, California Winters Putah Creek Park Percolation Dam Removal and Floodplain Restoration Project

ABBREVIATIONS AND ACRONYMS

AAQS- ambient air quality standards
AST- above ground storage tank
BMP- best management practice
CARB- California Air Resources Board
CDC- California Department of Conservation
CEQA- California Environmental Quality Act
cfs- cubic feet per second
CNDDB- California Natural Diversity Data Base
CNEL- community noise equivalent level
CNPS- California Native Plant Society
CRA- California Resources Agency
CRHR- California Register of Historic Resources
CVRWQCB- Central Valley Regional Water Quality Control Board
dBA- A-weighted decibels
CDFG- California Department of Fish and Game
Diesel PM- Particulate exhaust emissions from diesel-fueled engines
DTSC- Division of Toxic Substances Control
EIR- Environmental Impact Report
CAEPA- California Environmental Protection Agency
LIM- Land Inventory and Monitoring
LPCCC- Lower Putah Creek Coordinating Commitee
NMFS- National Marine Fisheries Service
NPL-National Priorities List
NOAA- National Oceanic and Atmospheric Administration
NO_X- oxides of nitrogen
NPDES- National Pollution Discharge Elimination System
NRCS- Natural Resources Conservation Service
PM_{10}- particulate matter under 10 microns
$PM_{2.5}$- particulate matter of 2.5 micrometers or less
RWQCB- California Regional Water Quality Control Board
SMARA- Surface Mining and Reclamation Act of 1975
SVAB- Sacramento Valley Air Basin
SVOC- semi-volatile organic compound
SCWA- Solano County Water Agency
SWPPP- Stormwater Pollution Prevention Plan
SWRCB- State Water Resources Control Board
USACE- United States Army Corps of Engineers
USEPA- United States Environmental Protection Agency

USFWS- United States Fish and Wildlife Service
UST- underground storage tank
VdB- vibration decibels
WEAP- Worker Environmental Awareness Program
YSAQMD- Yolo-Solano Air Quality Management District

PROJECT INFORMATION

1. **Project title**: Winters Putah Creek Nature Park /
   Floodplain Restoration and Recreational Access Project

2. **Lead agency name and address**: City of Winters
   318 First Street
   Winters, CA 95694

3. **Contact person and phone number**: Kate Kelly, Planning Manager (530) 795-4910 x113

4. **Project location**: Putah Creek, south of the City of Winters between the Winters Car Bridge and Highway 505.

5. **Project sponsor's name and address**: Solano County Water Agency
   P.O. Box 349
   Elmira, CA 95625-0349

6. **General plan designation**: Open Space (Solano County; City of Winters)

7. **Zoning**: Open Space (Solano County; City of Winters)

8. **Description of project** (Describe the whole action involved, including but not limited to later phases of the project, and any secondary, support, or off-site features necessary for its implementation. Attach additional sheets if necessary.):

   The proposal is divided into two phases, based on the sequencing needed to accomplish the project efficiently. Phase I includes the establishment of a monitoring program; percolation dam removal; stream recontouring; and, in-channel structural improvements including weir construction, bank stabilization, and habitat enhancement. Phase II includes the development of recreational amenities.

9. **Surrounding land uses and setting** (Briefly describe the project's surroundings): Surrounding land use includes suburban and rural residential, orchard production, and other agricultural uses.

10. **Other public agencies whose approval is required** (e.g., permits, financing approval, or participation agreement.): Consultation may be required with Solano County and the City of Winters. A California Department of Fish and Game 1601 Lake and Streambed Alteration Agreement, State Water Resources Control Board Water Quality 401 Certification, and Army Corps of Engineers 404(d) permit will also be required. Informal consultation with U.S Fish and Wildlife Service and National Oceanic and Atmospheric Administration National Marine Fisheries Service for impact to federally listed species has already been initiated.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is "Potentially Significant Impact" as indicated by the checklist on the following pages.

☐ Aesthetics	☐ Agricultural Resources	☐ Air Quality
☐ Biological Resources	☐ Cultural Resources	☐ Geology/Soils
☐ Hazards & Hazardous Materials	☐ Hydrology/Water Quality	☐ Land Use/Planning
☐ Mineral Resources	☐ Noise	☐ Population/Housing
☐ Public Services	☐ Recreation	☐ Transportation/Traffic
☐ Utilities/Service Systems	☐ Mandatory Findings of Significance	**X** None, with mitigation measures incorporated

DETERMINATION (to be completed by lead agency):

On the basis of this initial evaluation, the following finding is made:

☐ The proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

X Although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ The proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ The proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ Although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION,

including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

_____ __April 3, 2008___

Signature (prepared by): Kate Kelly, Planning Manager — Date
City of Winters

Mitigation Measure Compliance Review Agreement

I, being the applicant for the described project, agree to the full implementation of the mitigation measure(s) outlined in this environmental document as Conditions of Approval of the project.

I understand that by agreeing to the mitigation measure(s) outlined in this document, all foreseeable "significant effects on the environment" should be reduced to a less-than-significant level as required by the California Environmental Quality Act and Guidelines (CEQA), thereby permitting the City of Winters to publicly notice and circulate the environmental document for my project.

_____ __April 3, 2008__

Rich Marovich, Project Proponent — Date
(LPCC Streamkeeper)

EVALUATION OF ENVIRONMENTAL IMPACTS

1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

4) "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from Section XVII, "Earlier Analyses," may be cross-referenced).

5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:

   a) Earlier Analysis Used. Identify and state where they are available for review.
   b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
   c) Mitigation Measures. For effects that are "Less than Significant with Mitigation

Measures Incorporated," describe the mitigation measures, which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.

8) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.

9) The explanation of each issue should identify:
   a) the significance criteria or threshold, if any, used to evaluate each question and
   b) the mitigation measure identified, if any, to reduce the impact to less than significance

BACKGROUND AND INTRODUCTION

This Initial Study provides an environmental analysis pursuant to the California Environmental Quality Act (CEQA) of 1970, as amended, for the proposed update to the Winters Putah Creek Nature Park Master Plan and floodplain restoration and recreational access project (project or park).

The proposed project is intended to restore the Winters park along both side of Putah Creek to a more natural condition, one that is self-maintaining and supports native plant and animal species. A unique element of this restoration is that the restoration would allow better access to the park, and integrates the park in a community trail system. The Watershed Management Action Plan (EDAW, 2007a) ranks the park as "highest priority" for restoration throughout the creek.

The project approach is divided into two phases, based on the sequencing needed to accomplish the project efficiently. Phase I includes the percolation dam removal; stream recontouring and in-channel structural improvements including natural stone weir construction, bank stabilization; and, habitat enhancement including a vegetation management plan. Phase II includes the development of recreational amenities. Individual elements from within each phase may be implemented ahead or behind the overall phase to meet site-specific requirements, such as permitting.

The mitigation measures prescribed for environmental effects described in this Initial Study will be implemented in conjunction with the project, as required by CEQA. The mitigation measures will be incorporated into the project through project conditions of approval.

SITE DESCRIPTION

The project encompasses Putah Creek and its riparian zone, starting at the car bridge on Railroad Avenue extending to the I-505 crossing to the east. It is bordered by rural Putah Creek Road to the south and urbanized town center to the north (Figure 1).

GENERAL HABITAT CHARACTERISTICS

Vegetation communities were classified using Cheatham and Haller's (1975) California vegetation and classification system and California Natural Diversity Database (CNDDB)/Holland (1986), the recent revision of Cheatham and Haller by the CNDDB.

Habitat identified onsite essentially fits each of the three topographic positions: Riverine (RIV), Valley Foothill Riparian (VRI), and Valley Oak Woodland (VOW). The Riverine habitat, as classified by Cheatham and Haller, is predominantly Streams (10.2). There is no classification by CNDDB for Aquatic Habitats. The Valley Foothill Riparian habitat, as classified by Cheatham and Haller, is predominantly Central Valley Bottomland Woodland Forest (6.11) and as classified by CNDDB, it is predominantly Great Valley Riparian Forest (61400). The Valley Oak Woodland, as classified by Cheatham and Haller, is predominantly Central Valley Bottomland Woodland (6.11) and as classified by CNDDB, it is predominantly Great Valley-Valley Oak Riparian Forest (61430).

There are no specific restrictions or protection policies on the removal of or construction near oak trees in Solano county (Department of Environmental Management, 2003). The City of Winters General Plan Policy VI.C. 9-10 states that large, older and historically significant trees should not be removed unless they are diseased or represent an unavoidable obstacle to development. Development should be designed and constructed to avoid adverse impacts on such trees and the City shall encourage and support development projects and programs that enhance public appreciation and awareness of the natural environment (City of Winters, 1992). The Solano County Department of Environmental Management General Plan Resource Conservation Element states that development on slopes greater than 6% should avoid a loss of natural vegetation.

The project does not intend to develop the site in the traditional planning sense, and no long-term impact to native vegetation is expected. Care will be taken during this project to prevent disruption or loss of native vegetation.

Natural Communities

The most common plant community in the lower Putah Creek riparian corridor is mixed riparian forest. The width and complexity of mixed riparian forest varies and is characterized by one or more well-developed canopy layers.

When present, the highest canopy layer is generally open and dominated by tall Fremont cottonwood (*Populus fremontii*) or *Eucalyptus* spp. trees. The next canopy layer, frequently the uppermost, is typically moderately dense and composed of tree species such as valley oak (*Quercus lobata*), Oregon ash (*Fraxinus latifolia*), Goodding's willow *(Salix gooddingii*), and box elder (*Acer negundo* var. *californica*).

Figure 1. Site Vicinity Map

In some areas of the creek, a sub-canopy layer consists of dense riparian scrub dominated by willow species including arroyo willow (*Salix lasiolepis*) and sandbar willow (*S. exigua*). A discontinuous shrub layer is generally present within the mixed riparian forest including species such as blue elderberry (*Sambucus mexicana*), buttonbush (*Cephalanthus occidentalis*), Himalayan blackberry (*Rubus discolor*), wild rose (*Rosa californica*), poison oak (*Toxicodendron diversilobum*), and wild grape (*Vitis californica*).

A ground layer, when present, ranges from sparse to densely vegetated and consists of grasses such as creeping wild rye (*Leymus triticoides*) and forbs such as mugwort (*Artemisia douglasiana*). Seedlings of some of the more shade-tolerant of the tree species mentioned above can also be found in the understory. One of the intents of this project is to improve the composition of native species.

Wetlands and Other Waters

The project lays predominately within the historic 100-year floodplain of Putah Creek (Figure 2).

The site consists of riparian (riverine or river influenced) wetlands and open water. The riparian wetland includes seasonal and perennial wetlands along the creek channel and lower bank, instream wetlands that have formed on sand or gravel bars, and patches of emergent freshwater marsh. Riparian wetlands are dynamic, plant communities that are influenced by frequent flooding, scour, and creek water level fluctuations that occur on a seasonal and annual basis. Open water habitat includes the creek channel, and its associated side-channel ponds.

Putah Creek is considered to be waters of the United States and California, as it is a direct tributary to the Sacramento River. Approximately 14 acres of Putah Creek, or 1.45 river miles, will be restored and maintained as part of the proposed project.

Waters of the United States are defined as a navigable body of water, or tributary, however small (including adjacent wetlands), that is regulated by Section 404 of the Federal Clean Water Act or Section 10 of the Rivers and Harbors Act. Any project that involves working in navigable waters of the United States, including the discharge of dredged or fill material, must first obtain authorization from the United States Army Corps of Engineers (USACE), under Section 404 of the Clean Water Act.

A State of California Water Quality Certification (Clean Water Act Section 401 permit) may be required by the Regional Water Quality Control Board (RWQCB) before other permits are issued, and will involve implementation of a stormwater pollution prevention plan. If a proposed

project will result in the alteration of streams or of other waters of California, the California Department of Fish and Game (CDFG) requires notification prior to commencement, and may require a Lake or Streambed Alteration Agreement (CDFG Code § 1600-1603, 5650F).

Figure 2. Topographic Map

PROJECT DESCRIPTION

The proposed project is divided into two phases, based on the sequencing needed to accomplish the project efficiently. Phase I includes the percolation dam removal; stream recontouring and in-channel structural improvements, including weir construction and bank stabilization; and, habitat enhancement based on a vegetation management plan. Phase II includes the development of recreational amenities. The planning process for Lower Putah Creek has been the result of many years of collaboration and the hard work of many individuals and organizations. One of the very first planning documents was the 1993 Reconnaissance Planning Report Fish and Wildlife Resource Management Options for Lower Putah Creek, California, which recommended the creation of a Putah Creek management plan. The Watershed Management Action Plan (EDAW, 2005) is the context for the Winters Putah Creek Nature Park Accepted Conceptual Master Plan. There have been two master planning efforts to date, the City of Winters 1995 Putah Creek Master Plan and the 2008 Winters Putah Creek Nature Park Accepted Conceptual Master Plan, which is a proposed update to the 1995 document.

GEOMORPHOLOGY

Through the project site, Putah Creek flows west to east along the bottom of a deeply incised corridor. Water surface elevations are typically 28 to 32 feet below the terrace elevations. Some of the former riparian vegetation belt has re-established along the banks at the lower elevation. With the deeply incised channel and regulated flood flows after the Solano project, all peak flows have been contained within the confines of the upper terrace elevations (Poore, 2003).

The completion of the Solano Project that put the Monticello Dam and Solano Diversion dam in place in 1957 has altered the hydrologic regime of the creek, and buffered the effects of the frequent historic flood flows (USGS Station 11454000). Peak flows have attenuated from an estimated average of approximately 18,000 cfs to 8,000 cfs, with the document pre-dam peak of over 50,000 cfs to the post-dam peak of approximately 18,000 (USGS, 2008). Once the capacity of Lake Berryessa's reservoir pool is exceeded and the glory hole begins to spill, flood events are similar to the natural annual peak discharges (prior to the dam construction). A release of over 14,000 cubic feet per second (cfs) was recorded in March of 1983. Solano County Water agency records indicate that inflow to Lake Berryessa during the recent December 2002 flood may have been in excess of 90,000 cfs (per. comm., Solano County Water Agency). While the lake buffered the full effect of this flood, flows through the proposed project still likely reached several thousand cfs due to input from tributaries below the dam.

Even though flood levels still occur during large storms, lesser events that define channel morphology and riparian condition under the current restricted hydrograph are re-equilibrating within the historic channel morphology. The result of this change in flow regime, and the resulting hydrograph, has profoundly influenced the tributaries. Dry Creek and Pleasants Creek are both undergoing destabilization, apparently as a result of the change in base elevation and the flood elevation of Putah Creek (EDAW, 2005).

By controlling most peak runoff events at the Monticello Dam, the flow regime that defines channel dimensions, pattern, and slope has been altered and the channel responds accordingly to the new circumstances. This new channel morphology and hydrology appears to be slowly re-establishing its new equilibrium (Poore, 2003). However, the channel downstream of the dams has been significantly disturbed through: historic gravel mining and in-channel modifications; a full-width percolation dam; and, invasive species, such as giant reed (*Arundo donax*) and Himalayan blackberry (*Rubus armeniacus*) creating flow restrictions and bank reflections.

None of these disturbances are by themselves unusual in riverine systems, but in this case they significantly magnify the negative impacts on the channel. For example, several of the creek reaches through the park are continuous deep pools with no low terrace, and limited structural complexity. It appears, from comparative pictures from the 1950s at the percolation dam, that the stream substrate size class has diminished significantly from coarse gravel to silt. The riparian forest has essentially no seedling or sapling cohort, forecasting a significant problem when the existing mature forest dies.

The process of the natural channel reaching a new equilibrium, such as recreating and maintaining a natural pool sequence and a natural sinuosity ratio, is slowed by a reduced sediment supply, which has been interrupted by the Solano Project impoundments at Lake Berryessa and Lake Solano.

Nevertheless, this natural process is readily apparent along portions of the downstream reaches. In these areas, the primary channel has become significantly narrower, with a well-defined floodplain across the bottom of the creek. This low terrace ranges from 150 to 200 feet in width with a functional channel width of 28 to 32 feet. For comparison, a downstream restoration project near Davis, completed by the USACE, that used the same relative channel dimensions has been exceptionally stable and has maintained these dimensions after significant flow events.

PERCOLATION DAM

The dominating feature of the park is the base of a 1930's era percolation dam near the Winters Community Center. Since the original purpose of the dam, which was to increase local groundwater elevations, never materialized, and after it was flanked by flood flows in 1955 and essentially abandoned in place, the percolation dam has become a liability for the City of Winters (herein referred to as City), with significant negative environmental and aesthetic aspects:

- The structure may pose fish passage restrictions during certain flow levels;
- The structure limits the creek's ability to seek a new form by creating a channel scour feature setting a grade control, and maintaining a full floodplain-width spill surface;
- The structure is failing from undercutting at its base, and poses a potential liability; and,
- If an accident or injury occurs at the structure there is no emergency access.

The project plan also includes the placement of 4 cross-vane structures to establish grade, maintain the pool depth, and provide stream habitat structure complexity. These features will be designed to allow fish passage under all expected flows. Location of any such structure-habitat placements should coincide with available machinery access in over-widened reaches (Poore, 2003).

The removal of the percolation dam is proposed to begin as soon as permitting is completed in 2008. Project phases will be developed depending on mitigation requirements and water levels and are expected to continue through 2010.

VEGETATION MANAGEMENT PLAN

The WPCC has prepared a draft Vegetative Management Plan for the Park, included in Appendix A. This Plan outlines the general procedures for managing vegetation, both non-native and native, within the 40-acre park. The park plantings will only include native plantings, with species taken from nearby reaches when available. Some of the more common native plants include alder, arroyo willow, black willow, box elder, California buckeye, buttonbush, cottonwood, coyote bush, creeping wild rye, elderberry, Gooding's willow, miner's lettuce, mugwort, Santa Barbara sedge, California sycamore, torrent sedge, toyon, yellow willow, western redbud and wild rose. It will be important to keep the surrounding neighbors informed of the process, removal and replanting schedule, and coordinate volunteer replanting efforts. The large-scale removal of the exotics will take place in 2007 through 2012, and as the Plan states, replanting will occur as soon after the removal as possible. A program to eradicate invasive species from the floodplain is underway and will help insure the long-term function of the creek.

RECREATIONAL OPPORTUNITIES

The 1995 (adopted) and draft 2008 (conceptual) master plans were produced for development of recreational opportunities. Parts of the 1995 plan have been implemented, specifically the Nature Trail access that lies along the former detention ponds on the south side of the channel. Winters City Council accepted the draft 2008 Winters Putah Creek Nature Park Conceptual Master Plan (herein referred to as plan) and directed staff to commence CEQA review on March 18th, 2008. The document can be found in Appendix B.

The plan also called for the utilization of the railroad bridge for pedestrian and bicycle access to a trail system connecting the two sides of the stream. A 3 m (10 ft) wide trail will be created to the north of Putah Creek. This trail will be wide enough to accommodate bikers and pedestrians, as well as allow access for emergency and city service vehicles. A 3.6 m (12 ft) wide paved trail will be created to the south of Putah Creek on the upper terrace, parallel to the road. The current car bridge has no access lane for pedestrians and is dangerous to cross. Figure 3 describes a detailed drawing of the project.

Part of such a trail system is intact on the north bank of the stream, but no connecting trails exist on the south side of the channel. The project includes a plan to connect the entire park with pedestrian and bicycle trails. A proposed spiral ramp leading from the south end of the railroad bridge would provide access to the south floodplain trail network, and a footbridge across the full floodplain of the Creek, near the I-505 bridge right of way, would provide crossing downstream. There are two standing proposals for the bridge design: a freestanding bridge with piers aligned with the I-505 bridge piers, spanning the full-width of the upper terrace; and a similar structure upstream, approximately 200 m (660 ft), from the I-505 bridge. Access by heavy machinery to streambank locations may disrupt access temporarily. The construction of public use areas, trails and bridge access should follow, once equipment access is no longer needed. Seasonal access by light machinery for maintenance work may be necessary to remove debris or perform repair work.

Figure 3. Putah Creek Nature Park - Master Plan

ENVIRONMENTAL CHECKLIST

This initial study is prepared in compliance with the California Environmental Quality Act (CEQA) Guidelines. This format of the study is presented as follows. The project is evaluated based upon its effect on seventeen (17) major categories of environmental factors. Each factor is reviewed by responding to a series of questions regarding the impact of the project on each element of the overall factor. The Initial Study Checklist provides a formatted analysis that provides a determination of the effect of the project on the factor and its elements. The effect of the project is categorized into one of the following four categories of possible determinations:

Substantiation is then provided to justify each determination. One of the four following conclusions is then provided as a summary of the analysis for each of the major environmental factors.

- **Potentially Significant Impact:** An impact that could be significant, and for which no mitigation has been identified. If any potentially significant impacts are identified, an EIR must be prepared.

- **Potentially Significant Unless Mitigation Incorporated:** An impact that requires mitigation to reduce the impact to a less-than-significant level.

- **Less-Than-Significant Impact:** An impact that would not be considered significant under CEQA relative to existing standards.

- **No Impact:** The project would not have any impact.

ENVIRONMENTAL ISSUES

I. AESTHETICS Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	No Impact
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☐	**X**
b) Substantially damage scenic resources, including but not limited to trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	**X**
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	**X**	☐
d) Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?	☐	☐	**X**	☐

DISCUSSION

a) **No impact**. There is no designated scenic vista at the location, and the project area is substantially below the line of sight from the surrounding area.

b) **No impact**. There are no designated or generally accepted scenic resources in the corridor, outside of its existing riparian corridor and associated oak woodland, neither of which will be significantly impacted by this project. According to the State of California, there are no designated or eligible state scenic highways in the area.

c) **Less than significant impact**. Removal of the percolation dam is intended to have a no impact to the aesthetics of the area. Removal of the dam will restore the area to its historic natural state. The pedestrian bridge would be located adjacent to or near the existing I-505 bridge and is designed to blend in to the surrounding landscape. Short-term visual impacts associated with the invasive plant species removal and the revegetation program will be apparent during the construction phases. The riparian restoration work will promote fast-growing native species, which will return the site to better than the current visual condition within two to three years. Project phasing will ensure that only limited areas will be affected at one time.

d) **Less than significant impact**. Pedestrian lighting will be limited to those areas near the Community Center. Additional pathway lighting is not proposed at this time. The residents felt that additional pathway lighting would encourage people to linger in remote spaces after dark, and interfere with the natural experience.

II. AGRICULTURAL RESOURCES

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland.

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	No Impact
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	**X**
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	**X**
c) Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?	☐	☐	☐	**X**

DISCUSSION

a) **No impact**. The site is classified as "Urban and Built-up Land" according to the California Resources Agency (CRA). No farmland will be affected.

b) **No impact**. There is no conflict with either agricultural zoning or Williamson Act properties.

c) **No impact**. No part of the site is in use as farmland, and it would be marginal potential farmland regardless.

III. AIR QUALITY

Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations.

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☐	**X**
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	**X**	☐	☐
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	☐	☐	**X**	☐
d) Result in significant construction-related air quality impacts?	☐	☐	**X**	☐
e) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☐	**X**
f) Create objectionable odors affecting a substantial number of people?	☐	☐	☐	**X**

DISCUSSION

The project is located within the Sacramento Valley Air Basin (SVAB), under the jurisdiction of the Yolo-Solano Air Quality Management District (YSAQMD). The Sacramento Federal Nonattainment Area (including all of Yolo and part of Solano county) is currently in non-attainment for both the national (8-hour) and state (1-hour) ozone standards (EDAW, 2007c). The area is also currently designated as a non-attainment area for the state PM_{10} ambient air quality standard.

a) **No impact**. The overall project would have no negative impact on existing air quality plans, and has the potential of nominally reducing air emissions from vehicle use by promoting local walking and bike use. There is expected to be regional use of this park, however, the park would not likely be a sole destination that could promote additional air concerns from increased driving. The proposed project would not conflict with or obstruct implementation of air quality plans.

b) **Less than significant with mitigation incorporated**. Potential short-term impacts may occur during site clearing and grading from equipment exhaust emissions and dust. Vehicle emissions of ozone, ozone precursors, and PM_{10} will not contribute significantly to local violations of regulatory standards. The following mitigation measures will reduce potential impacts to less than significant.

Mitigation Measure AQ-1:

- *To the extent that equipment and technology is available, the contractor shall use State of California (CARB) certified catalyst and filtration technologies.*

- *All construction diesel engines, which have a rating of 50 hp or more, shall meet the Tier-2 California Emission Standards for off-road compression-ignition engines, unless otherwise certified by the Air District's Air Quality Construction Mitigation Monitor (AQCMM). In the event that a Tier II engine is not available, Tier I compliant or 1996 or newer engines will be used preferentially. Older engines will only be used if the AQCMM certifies that compliance is not feasible.*

- *Project sequencing is specifically designed to reduce air impacts from the operation of the heavy equipment. Wait times for dump trucks and idle time shall be minimized to 5 minutes or less.*

- *All disturbed areas, which are not being actively utilized for construction purposes, shall manage dust emissions using water, vegetative ground cover or other acceptable dust management practices.*

- *All bare ground will have ground cover replaced as soon as practicable.*

- *Heavy-duty diesel equipment will be maintained in optimum running condition.*

c) **Less than significant impact**. Taken in conjunction with other projects in the region, temporary construction emissions may contribute to levels that exceed AAQS on a cumulative basis, contributing to existing nonattainment conditions. By implementing the above-identified Mitigation Measure AQ-1, construction related emissions for the proposed project that would have had a potentially significant impact would be reduced to less-than-significant levels. Since, the proposed project would not exceed the YSAQMD's thresholds, the project would not result in a cumulatively considerable net increase of any criteria pollutant.

d) **Less than significant impact**. Certain residents, such as the very young, the elderly, and those suffering from certain illnesses or disabilities, are particularly sensitive to air pollution and are considered "sensitive receptors" (Yolo-Solano Air Quality Management District Online). The park is a recreational area that could attract sensitive receptors, such as young children, elderly, and people with respiratory conditions. Additionally, sensitive receptors may be located within nearby residential areas.

Since the use of mobilized equipment would be temporary, intermittent in combination with the dispersive properties of diesel PM, construction activities would not expose sensitive receptors to substantial pollutant concentrations. Areas near the construction equipment would also be temporarily restricted, further reducing potential exposure.

e) **No impact**. The occurrence and severity of odor impacts depend on numerous factors, including the nature, frequency, and intensity of the source; wind speed and direction; and the presence of sensitive receptors. Although offensive odors rarely cause any physical harm, they still can be very unpleasant, leading to considerable distress and often generating citizen complaints to local governments and regulatory agencies.

f) **No impact**. The YSAQMD has established Rule 2.5 – Nuisance to addresses such issues. This rule prohibits air pollutant emissions that "cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public or which endanger the comfort, repose, health, or safety of any such persons" (Yolo-Solano Air Quality Management District Online). The project will not result in the creation of objectionable odors.

IV. BIOLOGICAL RESOURCES Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	No Impact
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	X	☐	☐
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?	☐	X	☐	☐
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	X	☐	☐
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	X	☐
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	X
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	X

DISCUSSION

The project area is typical of the Putah Creek Watershed for plant species composition. Scattered willows (*Salix* sp.) dominate near the creeks edge, and on the remnant channel banks. There are occasional cottonwoods (*Populus* sp.) and alders (*Alnus* sp.) in the more mature part of this riparian vegetation. Blue elderberry (*Sambucus mexicanus*), coyote brush (*Baccharis pilularis*), and Himilayan blackberry (*Rubus discolor*) are typical in the understory. Valley (*Quercus lobata*) and live oaks (*Quercus agrifolia*), figs (*Ficus* sp.), and walnuts (*Juglans* sp.)

are dominant in the upper terraces. For more information on the plant species found in the Putah Creek Watershed please refer to the Lower Putah Creek Watershed Management Action Plan (EDAW, 2005).

Species common to the riparian plant community include wetland plants such as smartweed (*Polygonum* spp.), umbrella sedge (*Cyperus eragrostis*), sedges (*Carex* spp.), common rush (*Juncus effusus*), mugwort, cocklebur (*Xanthium strumarium*), rice cutgrass (*Leersia oryzoides*), canarygrass (*Phalaris* spp.), field mint (*Mentha arvensis*), and western goldenrod (*Euthamnia occidentalis*), as well as large emergent perennials such as cattails (*Typha angustifolia*) and tule (*Scirpus acutus*). Invasive weeds, including giant reed and tamarisk occur on sand or gravel bars in the creek (EDAW, 2005).

Species associated with open water include common floating plant species such as water milfoil (*Myriophyllum* sp.), floating water-primrose (*Ludwigia peploides*), waterweed (*Elodea* sp.), and curly pondweed (*Potamogeton crispus*). The character of the aquatic plant community varies from season to season and year to year, depending on the flow and flooding pattern, temperature, and availability of propagules. For instance in some years, invasive weeds such as water hyacinth (*Eichhornia crassipes*) may dominate, while in other years, such as during the sampling, weeds such as water milfoil may dominate (EDAW, 2005).

Animals observed at the project site include red-tailed hawks (*Buteo jamaicensis*), mourning doves (*Zenaida macroura)*, common crows (*Corvus brachyrhynchos*), great blue herons (*Ardea herodias*), and chinook salmon (*Oncorhynchus tshawtyscha*). For more information on the animal species found in the Putah Creek Watershed please refer to the Lower Putah Creek Watershed Management Action Plan (EDAW, 2005). Bird species have also been extensively studied on Putah Creek (Lindgren et al., 2006). There have been no Swainson's hawk nests observed or identified in the CNDDB within a 0.8 km (½ mi) radius of the project site. If a nest is identified a breeding bird survey will be conducted prior to construction activities following the appropriate protocols.

a) **Less than significant with mitigation incorporated**. Special-status species are generally defined as species that are assigned a status designation indicating possible risk to the species. These designations are assigned by state and federal resource agencies (e.g., California Department of Fish and Game, U.S. Fish and Wildlife Service) or by private research or conservation groups (e.g., National Audubon Society, California Native Plant Society). Assignment to a special status designation is usually done on the basis of a declining or potentially declining population, locally, regionally, or nationally. The extent that a species or population is at risk usually determines the status designation. The factors that determine risk to

a species or population generally fall into one of several categories, such as habitat loss or modification affecting the distribution and abundance of a species; environmental contaminants affecting the reproductive potential of a species; or, a variety of mortality factors such as hunting or fishing, interference with man-made objects (e.g., collision, electrocution, etc.), invasive species, or toxins.

A search of the California Department of Fish and Game (CDFG) California Natural Diversity Database (CNDDB) was conducted to obtain a list of recorded sightings of special-status species found within Yolo County (CDFG, 2007b). Information from this database was used to identify special-status species that have been previously documented in the greater project vicinity or have the potential to occur based on the presence of suitable habitat, soils, and geographical distribution. There was no need to look at multiple quads due to the unique riparian nature of the site. The following species have the potential to occur within or adjacent to the project:

Table 1. CNDDB Winters Quadrangle Query Results.

Scientific Name	Common Name	Federal Status	CA Status*	CDFG	CNPS
Actinemys marmorata marmorata	northwestern pond turtle	None	None	SC	
Athene cunicularia	burrowing owl	None	None	SC	
Branchinecta lynchi	vernal pool fairy shrimp	Threatened	None		
Buteo swainsoni	Swainson's hawk	None	Threatened		
California macrophyllum	round-leaved filaree	None	None		1B.1
Desmocerus californicus dimorphus	valley elderberry longhorn beetle	Threatened	None		
Navarretia leucocephala ssp.bakeri	Baker's navarretia	None	None		1B.1

CDFG, 2007. CNPS 1B.1-seriously endangered in California. *CA Status is CESA, and project-related impacts to species on the "threatened and endangered species" list could be considered significant and require mitigation.

Table 2. CNDDB Site Specific Query Results

Scientific Name	Common Name	Federal Status	CA Status	CDFG	Distance*
Actinemys marmorata marmorata	northwestern pond turtle	None	None	SC	within site
Athene cunicularia	burrowing owl	None	None	SC	1.09
Branchinecta lynchi	vernal pool fairy shrimp	Threatened	None		0.56
Buteo swainsoni	Swainson's hawk	None	Threatened		1.82
Desmocerus californicus dimorphus	valley elderberry longhorn beetle	Threatened	None		1.042

CDFG. 2007. *Distance is in miles and is taken from the site boundary to the closest edge of species radius (e.g., the center of the burrowing owl was 302 feet further away than the radius).

The following is a discussion of each of the species identified above as having a potential to occur, together with certain additional species that have been included for review.

The **northwestern pond turtle (*Actinemys marmorata marmorata*)** listed as a Species of Special Concern by the CDFG. This species is an aquatic turtle that usually leaves the aquatic site to reproduce, to aestivate, and to overwinter. Recent fieldwork has demonstrated that northwestern pond turtles may overwinter on land or in water, or may remain active in water during the winter season; this pattern may vary considerably with latitude and habitat type and remains poorly understood (CDFG, 1994a). Suitable habitat is available for the northwestern pond turtle throughout the project site, and therefore it is likely to occupy the site.

Mitigation Measure BR-1:
The pond turtle will be protected from site staging and operations areas through the use of fencing, a Worker Environmental Awareness Program (WEAP), and daily monitoring by a qualified biologist. The site will be inspected daily for the presence of turtles and netting or other barriers will be used when necessary to trap the turtles and move them to an area outside of the construction activity.

The **burrowing owl (*Athene cunicularia*)** listed as a Species of Special Concern by the CDFG and is protected by the Migratory Bird Treaty Act. The owl usually nests in an old burrow of a ground squirrel, badger or other small mammal, although they may dig their own burrow in soft soil. Where burrows are scarce, owls have been found to utilize pipes, culverts, and nest boxes (CDFG, 2007a). The actual nest chamber is lined with excrement, pellets, grass, feathers, and other debris (CDFG, 2007a). The burrowing owl is considered to be nocturnal although they can be found perched, during daylight hours, at or near the entrance to their burrow or on a nearby low post (CDFG, 2007a). They are thought to be semi-colonial and during the period when they have nestlings or recently fledged young, one or both owls are usually perched on guard near the entrance to the nest burrow (CDFG, 2007a). It is unlikely that this species will be present in or adjacent to the project site. Suitable habitat is not present for this species at the site.

Vernal pool fairy shrimp (*Brachinecta lynchi*) were listed as a federally Threatened Species on September 19, 1994 (59 FR 48153). They inhabit vernal pools and vernal swales. Vernal pools are generally small, ephemeral (seasonal) wetlands that form in shallow depressions underlain by a hardpan (*i.e.,* a layer near the ground surface that restricts the percolation of water) (Eriksen and Belk, 1999). These depressions fill with rainwater and runoff from adjacent areas during the winter and may remain inundated during the spring to early summer. Vernal pools are found in areas of level, or gently undulating topography in the lowlands of California, especially in the grasslands of the Central Valley (Collie and Lathrop, 1976; USFWS, 1994; Holland, 1988). It is unlikely that this species will be present in or adjacent to the project site. Suitable habitat is not present for this species. There are no identified vernal pools or swales within 0.56 miles of the

project site (CDFG, 2007b). The site is commonly inundated and scoured, and lacks appropriate soil types and conditions to support the species.

The **Swainson's hawk (*Buteo swainsoni*)** is listed as a State Threatened species. Nests are built on trees or utility poles at 4-100 feet from the ground (CDFG, 2000). Nest materials consist of sticks and plant parts of sagebrush, Russian thistle, and other weeds (Fitzner, 1980). Swainson's hawks forage over open habitats and often hunt from perches such as power poles and fence posts. During the breeding season, Swainson's hawks are known to travel long distances (up to 29 kilometers) in search of habitats with abundant prey (Estep, 1989; Woodbridge, 1991). In agricultural habitats, foraging activity is closely associated with harvest or cultivation activities that expose prey to predation (Estep, 1989; Woodbridge, 1991). No known occupied nests are within a 0.8 km (0.5 mi) radius of the project location, however ample habitat is available for new pairs to move in and nest (CDFG, 2007b). The closest observed nest is approximately 1.9 km (1.2 mi) to the northeast of the project site (CDFG, 2007b).

Mitigation Measure BR-2:

If construction occurs during the breeding season (March-September 15), the project applicant shall conduct pre-construction surveys no more than 14 days and no less than 7 days prior to initiating construction. A qualified biologist shall conduct the surveys and the surveys shall be submitted to the City for review. The survey area shall include all potential nesting sites located within 0.8 km (½ mi) of the project site. If no active nests are found during the surveys, no further mitigation shall be required except with regard to foraging habitat.

If an active nest used by a Swainson's hawk is found sufficiently close to the construction area, a qualified biologist shall notify the CDFG. No intensive new disturbances (e.g. heavy equipment operation associated with construction, use of cranes or draglines, new rock crushing activities) or other project related activities which may cause nest abandonment or forced fledging, should be initiated within 0.4 km (¼ mi) (buffer zone) of an active nest between March 1- September 15 or until August 15 if a Management Authorization or Biological Opinion is obtained for the project. If construction or other project related activities, which may cause nest abandonment or forced fledging, are necessary within the buffer zone, monitoring of the nest site by a qualified biologist should be required. Routine disturbances such as agricultural activities, commuter traffic, and routine facility maintenance activities within 0.4 km (¼ mi) of an active nest should not be prohibited (CDFG, 1994b).

The **valley elderberry longhorn beetle *(Desmocerus californicus dimorphus)*** was listed as a federally Threatened Species on August 8, 1980 (45 FR 52803). The life history of valley elderberry longhorn beetles (VELB) is not well known. Adult beetles are active from March to

June, which is their assumed breeding season (USFWS, 1984). VELB are known to lay eggs in the crevices of bark of elderberry trees (Craighead, 1923) and are closely associated with blue elderberry (*Sambucus mexicana* or *S. velutina*), which is an obligate host for the beetle larvae. Adult valley elderberry longhorn beetles are usually found upon or flying between elderberry plants. Critical habitat was designated for the VELB on August 8, 1980 (45 FR 52803 52807). The USFWS designated two critical habitat areas along the American River in the Sacramento area. According to the Recovery Plan for the species (USFWS, 1984), an area along Putah Creek in Solano County and an area west of the Nimbus Dam along the American River Parkway in Sacramento County are considered essential habitat. U.C. Davis researcher, Dr. Theresa Talley, has been conducting surveys for VELB along Putah Creek. While Dr. Talley has not found any beetles near the project site, there are numerous elderberry shrubs within the project area but not on any proposed trails or access routes. Care will be taken to avoid all shrubs within the project area.

Mitigation Measure BR-3:

Prior to land disturbance activities, the observed elderberry shrubs shall be identified, mapped, flagged, and be protected by orange temporary fencing for the duration of the project earthmoving activities. Complete avoidance (i.e., no adverse effects) may be assumed when a 30 m (100 ft) (or wider) buffer is established and maintained around elderberry plants containing stems 2.5 cm (1.0 in) or greater in diameter at ground level. In the event that work must proceed in areas where encroachment on the 30 m (100 ft) buffer has been approved by the USFWS, a minimum setback of at least 6 m (20ft) from the dripline of each elderberry plant shall be provided. Signs will be erected every 15 m (50 ft) along the edge of the avoidance area with the following information: "This area is habitat of the valley elderberry longhorn beetle, a threatened species, and must not be disturbed. This species is protected by the Endangered Species Act of 1973, as amended. Violators are subject to prosecution, fines, and imprisonment."(USFWS, 1999).

The **round-leaved filaree (*Erodium macrophyllym*)** is listed as seriously endangered in California (1B.1) by the California Native Plant Society (CNPS). Round-leaved filaree can be found from southern Oregon through California into northern Mexico in grasslands on friable clay as well as in nonnative grasslands on clay soils with relatively low cover of annual grasses (Jones and Stokes, 2006). It most often occurs in foothill locations at elevations between 200 and 2000 feet (Jones and Stokes, 2006). It is unlikely that this species will be present in or adjacent to the project site. Suitable habitat is not present for this species.

The **Pacific lamprey (*Lampetra tridentata*)**, with the exception of landlocked populations, spends the predatory phase of their life cycle in the ocean, where they attack a wide variety of various salmon and flatfishes. Landlocked forms spend the predatory phase (of unknown duration) in lakes or reservoirs, feeding on suckers and other large fishes. Adults usually move up into spawning streams between early March and late June. However, upstream movements in January and February have also been observed, and movements into July have been observed in northern streams (Moyle, 2002). As the majority project site is a long deep pool, with fine sediment, it is unlikely that this species would occupy the site and be consequently affected by the project.

The **Baker's navarretia (*Navarretia leucocephala* ssp. *bakeri*)** is listed as seriously endangered in California (1B.1) by the CNPS. Baker's navarretia is found in the Yellow Pine Forest, Northern Oak Woodland, Foothill Woodland, Valley Grassland, and Freshwater Wetlands plant communities (Calflora, 2007). Within these communities it can be found in meadows, vernal-pools and wetlands at elevations between 0 and 5500 feet (Calflora, 2007). While this species has not been observed on or adjacent to the site, there is the potential for these species to be present. Suitable wetland habitat is available for this species.

Mitigation Measure BR-4:
A pre-construction survey will be completed to ensure that this species is identified and if it does occur, it will be marked and avoided, and if necessary removed, with CDFG permission.

The **Central Valley steelhead (*Oncorhynchus mykiss)*** Evolutionarily Significant Unit (ESU) was listed as a threatened species on March 19, 1998 (63 FR 13347). An ESU is a distinctive group of Pacific salmon, steelhead, or sea-run cutthroat trout (National Marine Fisheries Service [NMFS], 2002). This ESU includes all naturally spawned populations of steelhead (and their progeny) in the Sacramento and San Joaquin Rivers and their tributaries. Steelhead inhabit riparian, emergent, palustrine habitat (Leidy, 2000). Spawning and rearing habitat is usually characterized by perennial streams with clear, cool to cold, fast flowing water with a high dissolved oxygen content and abundant gravels and riffles. Critical habitat for the Central Valley steelhead ESU was designated on February 16, 2000. Currently, the Central Valley steelhead ESU includes steelhead in all river reaches accessible to the Sacramento and San Joaquin Rivers and their tributaries in California (USFWS, 2000a). Also included are river reaches and estuarine areas of the Sacramento-San Joaquin Delta, all waters from Chipps Island westward to Carquinez Bridge, including Honker Bay, Grizzly Bay, Suisun Bay, and Carquinez Strait, all waters of San Pablo Bay westward of the Carquinez Bridge, and all waters of San Francisco Bay (north of the San Francisco/Oakland Bay Bridge) from San Pablo Bay to the Golden Gate Bridge. Based on Red Bluff Diversion Dam counts, hatchery counts, and prior natural spawning

escapement estimates from the early 1990s, McEwan and Jackson (1996) roughly estimated the total annual run size (hatchery and wild) for the entire system at no greater than 10,000 adult fish. The Lower Putah Creek Fish Sampling database, which has data from August of 1991 to October of 2005, shows no records of steelhead being observed in Putah Creek (accessed on 08/10/07). The project timing is outside of any potential steelhead run, and the creek is isolated from the Bay Delta by agricultural dams during this period as well.

The **chinook salmon (*Oncorhynchus tshawtyscha)*** is the largest and least abundant species of Pacific salmon (Behnke, 2002). Chinook salmon, along with other salmonids, are anadromous (a migratory fish that is born in fresh water and spends a portion of its life in the sea before returning to fresh water to spawn). Unlike steelhead, chinook salmon are semelparous (*i.e.*, they die following a single spawning event). Three chinook salmon ESUs may overlap within the project area: 1) Central Valley spring-run ESU; 2) Central Valley winter-run ESU; and 3) Central Valley fall and late fall-run ESU. The Central Valley spring-run chinook salmon ESU was listed as a threatened species on September 16, 1999 (NMFS, 1999). This ESU includes all naturally spawned populations of spring-run chinook salmon in the Sacramento River and its tributaries in California (NOAA Fisheries 1999). The Central Valley winter run chinook salmon ESU was listed as an endangered species on January 4, 1994 (NMFS, 1994). The Central Valley winter-run chinook salmon ESU includes populations of winter-run chinook salmon in the Sacramento River and its tributaries in California (NMFS, 1994). The Central Valley fall and late fall-run chinook salmon ESU was designated as a candidate for listing on September 16, 1999 (NMFS, 1999). This ESU includes all naturally spawned populations of fall-run chinook salmon in the Sacramento and San Joaquin River Basins and their tributaries, east of the Carquinez Strait, California (NMFS, 1999). This species was observed and recorded in the Lower Putah Creek Watershed Management Plan (EDAW, 2005). The timing of the project activities are designed to eliminate potential impacts to this species, and the Creek is isolated from the Bay Delta by agricultural dams during this period as well. It is unlikely that the project will affect this ESU.

Of the potential sensitive species that may be present in the project area, the following have the greatest potential to be significantly affected by the project: northwestern pond turtle (*Actinemys marmorata marmorata*), Swainson's hawk (*Buteo swainsoni*), valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*), Baker's navarretia (*Navarretia leucocephala ssp. bakeri*) and Fall-run chinook salmon (*Oncorhynchus tshawtyscha*).

Each of the listed species with potential to use the site will be identified in a Worker Environmental Awareness Program (WEAP) that includes large color photographs, species description, and regulatory requirements in English and Spanish. All workers will be trained and

checked off as a part of the WEAP. Qualified staff will be available for each major project phase to clear the site and address any site-specific issues that arise.

These potential impacts will be mitigated through a series of standard biological mitigation efforts. The mitigation efforts are tailored to the needs of the individual species with the potential to be affected.

Mitigation Measure BR-5:

Implementation of the following mitigation measure would reduce the potential impacts related to biological resources to a less than significant impact.

Prior to any grading activities onsite, the project proponent shall:

1.) Submit the Initiation Package to the USACE, USEPA, USFWS and CDFG review team for consideration on the 404(d) Permit application process, for a Section 7 consultation and possible Take Permit.

All native fish species will be protected either by timing the in-stream activities outside of the movement and breeding seasons, or through displacement and temporary dewatering. The final mitigation elements will be developed in consultation with the USFWS and CDFG. The potential for indirect impacts will be mitigated for by sediment control activities under the SWPPP.

b) **Less than significant with mitigation incorporated**. The project has the potential to effect riparian habitat. Equipment will be operated within the riparian zone. The riparian zone is in very poor ecological condition and is strongly influenced by rip-rap, altered channel morphology, gravel loss, and a significant structure, as well as non-native invasive species displacing the growing space available to native vegetation. The project intent is to increase the quality and extent of riparian cover. The impacts of the re-establishment of channel profile, and the elimination of non-native vegetation will be significant over the short-term, until new native vegetation establishes itself. This short-term impact will be negligible and is less than the current stream bank failures and loss of native riparian habitat due to invasive species. The resulting restored banks and channel will have significantly positive long-term benefits to native plants, animals, and fish.

Mitigation Measure BR-6:

Implementation of the following mitigation measure would reduce the potential impacts to a less than significant impact.

Prior to the commencement of grading or construction activities onsite, the applicant shall comply with all of the following:

1.) Obtain and comply with a California Department of Fish & Game, Streambed Alteration Agreement in accordance with Sections 1600-1616 of the California Fish & Game Code, as required.

2.) Obtain and comply with the provisions of a SWPPP permit from the California Regional Water Quality Control Board. Construction cannot be started until the SWPPP is issued.

3.) Establish native grass and accelerate riparian transplanting for cover.

c) **Less than significant with mitigation incorporated**. Adjacent seasonal wetlands within the floodplain have the potential to be impacted by this project. These wetlands will be protected by identifying, avoiding and mitigating for them as part of the 404(d) permitting process.

Mitigation Measure BR-7:
Implementation of the following mitigation measures would reduce the potential impacts related to alteration of seasonal wetlands within the floodplain to a less than significant impact.

Prior to the commencement of grading or construction activities onsite, the applicant shall comply with all of the following:

1). Obtain a USACE 404(d) permit.

2). Implement a mitigation plan for replacement (creation, restoration, and preservation) of impacted seasonal wetlands within the floodplain, subject to USACE approval.

d) **Less than significant impact**. There is the potential for some incidental and temporary resident fish movement restriction during the removal of the percolation dam. That restriction would be assessed by CDFG under the 1600 series permitting process. Specific mitigation measures may be required and would be implemented for that portion of the project. Salmonid migration timing would be avoided.

e) **No impact**. The project does not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance

f) **No impact**. No Habitat Conservation Plan, Natural Community Conservation Plan, or other approved regional, or State habitat conservation plan has been adopted for the project site, or the

surrounding area. Yolo County is in the process of developing such a document, but it is not complete. The City also has a Habitat Mitigation Program (Appendix C) however, there are no apparent conflicts with this program or any of the proposed plans, and the project would support the restoration of riparian habitat.

V. CULTURAL RESOURCES Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	No Impact
a) Cause a substantial adverse change in the significance of a historical resource as defined in 15064.5?	☐	☐	☐	**X**
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to 15064.5?	☐	☐	☐	**X**
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☐	**X**
d) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☐	**X**

DISCUSSION

For the purposes of CEQA, a historical resource is a resource listed in, or determined eligible for listing in, the California Register of Historic Resources (CRHR). When a project would affect an archaeological site, a determination must be made whether the site is a historical resource. This is defined (EDAW, 2007c) as any site that:

(A) Is historically or archaeologically significant, or is significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, or cultural annals of California; and,
(B) Meets any of the following criteria:
   a. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
   b. Is associated with the lives of persons important in our past;
   c. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or,
   d. Has yielded, or may be likely to yield, information important in prehistory or history.

a-d) **No impact**. EDAW (2007b) undertook a cultural resource investigation of the park area in conjunction with the project. This report is included in Appendix D. Additionally, Jones & Stokes preformed a cultural resource study for substantial parts of the project area. This is

included in three reports presented in a publicly available document, submitted by the Solano County Department of Resource Management to the City (Jones and Stokes, 2008).

Two historic-era bridges, Bridge 23C0243 and Railroad Bridge, located within the project area appear to be eligible for listing on the CRHR at the local level, for their association with the early development of Winters; however, neither of these two bridges would be affected by project activities (EDAW, 2007b; Jones & Stokes, 2008). A historic gas station, Lemos Service Station, was also identified as a historical resource for the purposes of CEQA (Jones & Stokes, 2008). The location of this resource is approximately 100 m (300ft) from the project site and would not be affected by project activities.

The percolation dam, although old enough to meet general age criteria for historic structures, does not function as designed due to significant damage to the superstructure and has shifted on its foundation. Flood flows cut around the dam in 1955 and operation of the flash boards ceased that year (pers. comm., Newton Wallace, Winters Express). No documents associated with the methods of construction, plans, or architects or designers have been discovered. After a thorough search of the City records by staff, the following conclusions have been made. The percolation dam is not historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California.

The percolation dam is not associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage; or associated with the lives of persons important in California's past; it does not embody the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or, yielded, or may be likely to yield, information important in prehistory or history.

Mitigation Measure CR-1:

Even though the location of the project site is not expected to contain cultural or historic resources, ground-disrupting activities could inadvertently expose and significantly impact previously unrecorded human remains. Should previously undisclosed archaeological resources be found, the following procedures would be applied. Any locally darkened sediments, concentrations of chipped stone especially obsidian and flint, any shaped stone, circular pits in bedrock, and/or concentrations of bone or shell are found, all work in the immediate vicinity of the find(s) shall cease until a qualified archaeologist can be retained to evaluate the find(s) and make recommendations as necessary.

There are no known resources have been reported in this vicinity, and although project geology and geomorphology suggests that such resources are unlikely within the Study Area, they nevertheless could occur. If any of the above listed items are found below the surface, the same procedures indicated above shall be followed. If human remains or bones of any type are found, the stipulations set forth in Section 15064.5 of the CEQA Guidelines (formerly included in Appendix K of the CEQA Guidelines) shall be followed. Work shall cease in the area of the find(s) until qualified individuals (County Coroner by law, in practice a qualified archaeologist or forensic anthropologist working with the local Indian community) have determined that the bone is human and archaeological in nature. If the bone is human and archaeological, the project proponent shall follow the procedures indicated in the California Public Resources Code as they relate to the discovery of human remains. The above noted procedures shall be included within the project plan and shall be employed during project construction, thereby incorporated as part of the project description.

VI. GEOLOGY AND SOILS Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	No Impact
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☐	**X**
ii) Strong seismic ground shaking?	☐	☐	☐	**X**
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☐	**X**
iv) Landslides?	☐	☐	**X**	☐
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	**X**	☐
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☐	**X**
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	☐	☐	**X**	☐
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	**X**	☐

DISCUSSION

The site is located at the edge of the Great Valley geomorphic province of California, a large, elongate, northwest-trending structural trough, generally constrained to the west by the Coast Ranges and to the east by the foothills of the Sierra Nevada (Norris and Webb, 1990). The Great Valley consists of two valleys lying end-to-end, with the Sacramento Valley to the north and the

San Joaquin Valley to the south.

The Sacramento and San Joaquin Valleys have been filled to their present elevations with thick sequences of sediment derived from both marine and continental sources. The sedimentary deposits range in thickness from relatively thin deposits along the eastern valley edge to more than 25,000 feet in the south central portion of the Great Valley (Norris and Webb, 1990). The sedimentary geologic formations of the Great Valley province vary in age from Jurassic to Quaternary, with the older deposits being primarily marine in origin. Younger sediments are continentally derived and were typically deposited in lacustrine, fluvial, and alluvial environments, with their main source being the Sierra Nevada.

a i-iii) **No impact**. The project site is located within Seismic Zone 3 and does not lie within or adjacent to an Alquist-Priolo Earthquake Fault Zone (California Department of Conservation [CDC], 1994 and 2008). The nearest mapped active faults are the Green Valley Fault located approximately 15 miles to the southwest, the Dunnigan Hills Fault located approximately 18 miles to the northeast, and the Hunting Creek Fault located approximately 27 miles to the northwest (CDC, 1994).

a iv) **Less than significant impact**. There is a potential for landslides due to relatively steep slopes along the northern and southern banks of Putah Creek under existing conditions. However, with the stabilization of the toe of the creek, establishment of vegetation, and regrading slopes for trails and access, the potential for landslides will be unlikely.

b) **Less than significant impact**. Site grading and heavy equipment operation associated with the project could result in some soil erosion, however as a condition of approval of any grading permit, the contractor is required to control dust and wind erosion through a combination of watering and erosion control practices (refer to Mitigation Measure AQ-1).

During grading, steps will be taken to ensure that dust and soil erosion does not affect either the adjacent creek or residences in the area (refer to mitigation in the Air Quality section). In compliance with the 402 permit, the project is required to implement best management practices (BMPs) during construction to ensure that all soil erosion and deposition is contained within the construction site. Such practices may include covering the graded area with straw or straw matting and using water for dust control (refer to Mitigation Measure AQ-1). Therefore the project would not be expected to result in substantial soil erosion, siltation, or loss of topsoil.

The project intends to follow the City's General Plan Policies VI.D.6-7 to further ensure that soil erosion, siltation, or loss of topsoil does not occur. These policies state that the City shall seek

state grant funding for revegetation, habitat preservation, and erosion control in the Putah Creek and Dry Creek corridors. The City shall work with Yolo County, Solano County, the Putah Creek Council, the CDFG, and the USACE in establishing guidelines for erosion control measures along Putah Creek and Dry Creek. Such guidelines should implement the following principles:

- Slope stabilization projects should emphasize revegetation.
- Stabilization projects that involve the use of cribs, gabions, rock and wire mattresses, or wire mesh over stone should be screened from public view with vegetation to assure a naturalistic appearance.

Brush clearing, mowing of natural vegetation, fire breaks, or similar activities along Putah Creek and Dry Creek shall be prohibited unless a demonstrated need exists to protect the public health, safety, or welfare, as determined by the Fire Protection District or other public agency with legal jurisdiction (General Plan Policy VI.D.8 in City of Winters, 1992)

c) **No impact**. The project site is not located in an area consistent with unstable soils or geologic units (National Resource Conservation Service [NRCS], 2008a,b).

d) **Less than significant impact**. Expansive soils are those that greatly increase in volume when they absorb water and shrink when they dry out. These soils are typically characterized by large amounts of finer grained materials such as silts and clays within the soil matrix. Expansion is measured by shrink-swell potential, which is the relative volume change in a soil with a gain in moisture (City of Davis, 2004).

The site soils consist of Yolo loam and Yolo silt loam (NRCS, 2008a,b). These soils have the potential to be expansive with the addition of a large volume of water. However, no dwelling structures are intended to be constructed as a result of this project and where permanent structures are proposed, geotechnical engineering analysis will provide for appropriate foundations or footings.

e) **Less than significant impact**. The project does not intend to use septic tanks or alternative wastewater disposal systems. It has been proposed to use a portable restroom, which will be located along Putah Creek Road near the main entry into Putah Creek Flats, which is on the upper bank of the south side of the creek (Figure 3).

VII. HAZARDS AND HAZARDOUS MATERIALS Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	X	☐
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☐	X
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	X	☐
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	X
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	X
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	X
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	X
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	X	☐	☐

DISCUSSION

a) **Less than significant impact**. The proposed project would contain no hazardous materials. However, during routine maintenance and for short periods associated with construction, certain potentially hazardous materials (such as pesticides, herbicides, fertilizers, gasoline, and solvents) may be transported to, and used on the site. If not properly used and stored, such materials could potentially create health hazards for park users and neighboring residents. However, the possibility of accidental release in a manner harmful to humans or the environment would be minimal as the chemicals used for normal maintenance are not typically of sufficient amount or concentration to pose hazards to the public.

Hazardous materials and waste regulations are implemented by a number of government agencies including, but not limited to, the following:

- U.S. Environmental Protection Agency (U.S. EPA),
- California Environmental Protection Agency (EPA) – Division of Toxic Substances Control (DTSC),
- Regional Water Quality Control Board (RWQCB),
- California Highway Patrol, and
- Local police and fire departments.

Each of the mentioned agencies has established regulations regarding the proper transportation, handling, management, use, storage, and disposal of hazardous materials for specific operations and activities.

b) **No impact**. The site is not known or expected to contain any underground storage tanks (USTs), aboveground storage tanks (ASTs), gas lines, or any other item that may create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.

c) **Less than significant impact**. The project site is located near one school (Winters Community Christian School, located approximately 0.21 km (0.13 mi) to the northwest). However, as discussed in Item VII(a,b), above, and in the Air Quality section of this Initial Study, construction of the proposed project is not expected to handle or emit significant quantities of hazardous or acutely hazardous materials, substances, or waste.

d) **No impact**. According to the hazardous materials site list compiled by the California DTSC, Winters does not contain any properties considered federal superfund sites (NPL), state response sites, voluntary cleanup sites, or school cleanup sites (DTSC, 2008).

e) **No impact**. The project site is not within two miles of a public airport (USGS, 1970).

f) **No impact**. No private airstrip is located in proximity to the project site (USGS, 1970).

g) **No impact**. The proposed project would have no effect on any emergency plan. The project does not propose alteration of the existing street system, and construction of the project and use of the site would not place any permanent or temporary physical barriers on any existing public streets. Furthermore, the project site is not utilized by any emergency response agencies, and no emergency response facilities exist in the project vicinity.

h) **Less than significant with mitigation incorporated**. The project is designed to be a nature park with significant vegetation established. The vegetation that will be planted as a result of this project is not typically a fire hazard, however transients and children have been known to start fires in the project area. Since the project is located near residences there is the possibility of loss, injury or death involving wildland fires due to arson. Heavy equipment used during project development can become hot during operation, which could potentially start a fire. The removal of non-native invasive species should reduce the potential of wildland fires by reducing fire fuels and fire sustaining eucalyptus litter.

Mitigation Measure HHM-1

- *During construction, operation, and maintenance of the project, all equipment operating with an internal combustion engine shall be equipped with federally approved spark arresters. Spark arresters are not required on trucks, buses, and passenger vehicles (excluding motorcycles) that are equipped with an unaltered muffler or on diesel engines equipped with a turbocharger.*
- *Operating or using any internal combustion engine, on any timber, brush, or grass covered land, including trails and roads traversing such land, without a spark arrester, maintained in effective working order, meeting either (I) Department of Agriculture, Forest Service standard 5100, "SPARK ARRESTERS FOR INTERNAL COMBUSTION ENGINES," (current edition); or (II) the Society of Automotive Engineers (SAE) recommended Practices J335, "MULTIPOSITION SMALL ENGINE EXHAUST SYSTEM FIRE IGNITION SUPPRESSION," (current revision) and J350, 36 CFR 261.52(j), is prohibited.*

- *Passenger carrying vehicles, pickups, and medium and large highway trucks (80,000 Gross Vehicle Weight) will be equipped with a factory designed muffler system that is specified for the make and model of the respective vehicle/truck or with a muffler system that is equivalent to or exceeds factory specifications.*
- *Exhaust systems shall be properly installed and continually maintained in serviceable condition.*
- *While in use, each internal combustion engine including tractors, trucks, yarders, loaders, welders, generators, stationary engines, or comparable powered equipment will be provided with at least the following:*
  - *One fire extinguisher, at least 5#ABC with an Underwriters Laboratory (UL) rating of 3A 40BC, or greater.*
  - *One shovel, sharp, size O or larger, roundpointed with an overall length of at least 48 inches.*
  - *One axe, sharp, double bit 31/2#, or one sharp pulaski.*
  - *Extinguishers, shovels, axes, and pulaskis shall be mounted so as to be readily available from the ground. All tools shall be maintained in a serviceable condition.*

VIII. HYDROLOGY AND WATER QUALITY Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	No Impact
a) Violate any water quality standards or waste discharge requirements?	☐	☐	X	☐
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	X	☐
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation on- or off-site?	☐	☐	X	☐
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site?	☐	☐	X	☐
e) Create or contribute runoff water, which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	☐	X
f) Otherwise substantially degrade water quality?	☐	☐	☐	X
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☐	X
h) Place within a 100-year flood hazard area structures that would impede or redirect flood flows?	☐	☐	X	☐

VIII. HYDROLOGY AND WATER QUALITY Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	No Impact
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☐	X	☐
j) Inundation by seiche, tsunami, or mudflow?	☐	☐	X	☐

DISCUSSION

a) **Less than significant impact**. Compliance with all applicable regulatory requirements, stated below, which are designed to maintain and improve water quality from development activities will be enforced throughout the duration of the project.

Section 1600 of the California Fish and Game Code requires that any person, governmental agency, or public utility proposing any activity that will divert or obstruct the natural flow of or change the bed, channel or bank of any river, stream, or lake, or proposing to use any material from a streambed, to first notify CDFG of such proposed activity.

The City is within the jurisdiction of the Central Valley Regional Water Quality Control Board (CVRWQCB). According to the CVRWQCB, construction activities disturbing one or more acres are required to obtain a National Pollution Discharge Elimination System (NPDES) General Activity Stormwater Permit. This permit controls construction and operation activities, and ensures that the project would not exceed the limitations of receiving waters, and thus would not exceed water quality standards. The general permit requires the permittee to employ BMPs before, during, and after construction. The primary objective of BMPs is to reduce non-point source pollution into waterways.

To comply with Section 402 of the Clean Water Act, the project proponent would be required to develop a Stormwater Pollution Prevention Plan (SWPPP) that describes the site, runoff, erosion and sediment controls, means of waste disposal, implementation of approved local plans, control of post-construction sediment and erosion control measures and maintenance responsibilities, and non-stormwater management controls. BMPs would be determined in the SWPPP and would act to reduce water quality impacts, including erosion and siltation, to the extent practicable.

To comply with Section 404(d) of the Federal Clean Water Act, authorization from the Secretary of the Army, acting through the Corps of Engineers, is required for the discharge of dredged or fill material into all waters of the United States. Waters of the United States include traditionally navigable waters, interstate waters, their tributaries, and adjacent wetlands. These categories include most wetlands, intermittent and ephemeral streams where there is an established ordinary high water mark, and areas subject to the ebb and flow of the tide. An initiation package is being completed as part of the permitting for the site. The purpose of the initiation package is to review the proposed project in sufficient detail to determine to what extent the proposed action may affect any of the threatened, endangered, proposed, or sensitive species and designated or proposed critical habitats. The initiation package will be prepared in accordance with legal requirements set forth under regulations implementing Section 7 of the Endangered Species Act (50 CFR 402; 16 U.S.C. 1536 (c)) (USFWS, 2007).

Pursuant to Section 401 of the Clean Water Act, projects that require a Corps permit for discharge of dredge or fill material must obtain a water quality certification or a waiver that confirms a project complies with state water quality standards before the Corps permit is valid. State water quality is regulated/administered by the State Water Resources Control Board and its nine Regional Water Quality Control Boards (RWQCB). The state also maintains independent regulatory authority over the placement of waste, including fill, into waters of the State under the Porter-Cologne Act.

Refer to the Mitigation Measures in the Biological Resources section for information on obtaining the required permits.

b) **Less than significant impact**. All water required for project construction activities (i.e., dust control during site grading) and landscape irrigation will be obtained from the City water system, which uses groundwater for municipal water supply. The project would not include large subsurface features or wells and would consequently not likely affect the direction or rate of flow of groundwater. Groundwater levels have been fairly stable in Winters, even with the highest historic pumping levels. Short-term revegetation irrigation would constitute the largest use of water on the site (City of Winters, 2005).

Groundwater will not be significantly impacted during construction, because only minimal surface grading will be required to construct the park, and impervious surfaces will be relatively small in size and therefore, would not substantially affect groundwater recharge.

c-d) **Less than significant impact**. As mentioned in Section VIII(b) above, only minimal surface grading will be required to construct the park. The only impervious surfaces are

associated with possible special needs accessible parking areas and will be relatively small in size and will not substantially affect drainage patterns.

The greatest potential impacts to water quality will be the removal of the percolation dam, realignment of the stream channel and implementing channel stability measures (e.g., constructing weirs). The proposed creek realignment will narrow most of the creek to approximately 10 m (30 ft) wide, with meanders and pools ranging from 40 to 73 m (130 to 240 ft) apart. For the most part, the new creek bed will be shallower than what it is now. Wide flood plains, or terraces, will fan out from the creek banks for 10 to 30 m (30 to 100 ft) on both sides of the creek. Where feasible, the creek banks will be extended, making the slopes less steep. These changes will return the creek to a dimension that reflects a more natural width and meander, similar to the creek above and below this stretch, and set up conditions that can be naturally sustaining. The wide flood plain will allow the creek to move within its banks, make it possible to restore the native vegetation, and open the park to the community.

The removal of the percolation dam foundation will allow for the lateral, and to a lesser degree, vertical movement of the channel. The current streambed gradient will be maintained through a series of w-weirs. These gradient controls should eliminate any potential of undermining upstream structures, such as the railroad bridge, without causing flood cross-section restriction. The existing w-weirs on Putah Creek, and its tributary Dry Creek, have had significantly positive effects, such as creating stream structure, improving dissolved oxygen and maintaining grade.

By moving the portions of the new, narrower creek channel to the center of the banks, there will be physical room for the creek to develop its own meander, especially in the widest section, where the old aeration ponds are now. This proposed floodplain terrace is approximately 100 m (300 ft) wide. Based on future water flows and revegetation, the creek would then be able to change its own course.

These impacts however, will be temporary because the overall goal of the project is to restore the quality and availability of habitat along the creek, remove invasive weed species, and make available suitable spawning sized gravel for salmon. The revegetation program is designed to protect the soils from substantial erosion and siltation. In essence, the project itself is mitigating the temporary impacts to the water quality by enhancing and contributing to the long-term health of the watershed.

The project also tends to follow the City's General Plan Policy Document (1994), specifically implementing General Plan Policies VI.D.5. This policy states that modifications to the creek or creek channels and other wetland features (e.g., bridge crossing, flood control improvements, or

culverting) shall be designed to minimize disturbance to areas of dense riparian and marshlands cover. Any proposed channel modifications shall be coordinated with representatives of the CDFG and USACE to ensure that the concerns and requirements of both agencies can be easily incorporated into specific development plans during the initial phase of project design.

e) **No impact**. Refer to discussion items c and d.

f) **No impact**. Refer to discussion items a and c.

g) **No impact**. According to the FEMA Flood Insurance Rate Map for the city of Winters, Yolo County, the area located within the Putah Creek channel is designated as Flood Zone A, within the 100-year floodplain. The residential area is well above the creek channel and is shown as Zone X, outside of the 100-year floodplain.

h) **Less than significant impact**. The project does not intend to place structures that would impede or redirect flood flows within the 100-year flood hazard area. If temporary diversion dams are used, they will be removed before anadromous fish migration or the probability of floods. Any footings or other potential flow restrictions will be placed above the 100-year flood elevation.

i) **Less than significant impact**. The project site is located approximately 16 km (10 mi) east of the Monticello Dam on Lake Berryessa. Failure or overtopping of the dam could result in severe flooding of the Winters area and loss of life. However, this occurrence, which is addressed in the Yolo County Emergency Plan, is not considered a likely substantial risk, and the risk is not modified by this project.

j) **Less than significant impact**. No water bodies are nearby that could cause flooding by seiche or tsunami. There is the potential for minimal mudflow, after a significant rainfall event (a substantial amount of rain would have to fall in a very short amount of time) due to the relatively steep slopes along the creek channel. Implementation of the revegetation program will help stabilize banks (refer to Mitigation Measure AQ-1 and BR-6).

IX. LAND USE AND PLANNING Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	No Impact
a) Physically divide an established community?	☐	☐	☐	**X**
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	**X**
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	**X**

DISCUSSION

a) **No impact**. The majority of the project site is located in an undeveloped area. The proposed project is also consistent with the general plan land use designation for the project site.

b) **No impact**. The project does not conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project adopted for the purpose of avoiding or mitigating an environmental effect.

The City's policies (General Plan Policy V.A.1, 11 and 13) are to require seven acres of developed parkland per 1000 residents, encourage the development of recreational facilities along Putah Creek near the Community Center, and emphasize the use of drought-tolerant and drought-resistant landscaping in the development of City parks. In planning recreation programs, the City shall promote the active involvement of all affected residents, including those with special needs, such as the physically disabled and the elderly (General Plan Policy V.C.1). The project will support these policies by developing parkland including recreational use of Putah Creek, planting drought-tolerant vegetation and creating special needs accessible recreational areas.

The project intends to support and follow the City's policies for natural resources:

The City shall condition development approvals to minimize the discharge of sediment from grading into Putah Creek and Dry Creek. To this end, grading should be carried out during the dry months, when possible. Areas not being graded should be disturbed as little as possible and

construction and grading areas, as well as soil stockpiles should be covered or temporarily revegetated when left for long periods. Revegetation of slopes should be carried out immediately upon completion of grading. Also, temporary drainage structures and sedimentation basins must be installed to prevent sediment from entering and thereby degrading the quality of downstream surface waters, particularly Putah Creek (General Plan Policy VI.A.6).

The City shall promote the use of drought-tolerant and native plants, especially valley oaks, for landscaping roadsides, parks, schools, and private properties; and parks, drainage-detention areas, and golf course development shall incorporate areas of native vegetation and wildlife habitat. Large, older and historically significant trees should not be removed unless they are diseased or represent an unavoidable obstacle to development. Development should be designed and constructed to avoid adverse impacts on such trees and the City shall encourage and support development projects and programs that enhance public appreciation and awareness of the natural environment (General Plan Policy VI.C. 7-10).

The City's General Plan Policy (VI.D.2-3) states that except for recreational trails and recreational uses developed along Putah Creek in the downtown area, the Putah Creek and Dry Creek corridors should be preserved as much as possible in their natural state. Public access and recreational facilities, such as trails, picnic areas, and other recreational developments, shall be sited to minimize on sensitive wildlife habitat or riparian vegetation. The City shall develop a program for habitat management within the Putah Creek and Dry Creek corridors consistent with the following principles:

- Trees and shrubs planted within the creek corridors shall be selected from a list of native plants approved by the City.
- Non-native trees and shrubs shall be removed from the creek corridors according to a long-term program approved by the City.
- New irrigation and planting within the dripline of existing native oaks shall be prohibited. Irrigated turf areas shall be placed only in areas where there are no mature native trees that could be damaged by changes in the environment, such as summer watering.

The project intends to only grade where necessary for the stream restoration phase and will implement a revegetation program immediately upon completion of grading. The project supports the restoration of riparian habitat and the enhancement of a nature park for recreational uses.

c) **No impact**. No Habitat Conservation Plan, Natural Community Conservation Plan, or other approved regional, or State habitat conservation plan has been adopted for the project site. The

County and Cities are in the process of developing such a document, but it is not complete. The City does have a Habitat Mitigation Program (Appendix C) however, there are no apparent conflicts with this program, and the project would support the restoration of riparian habitat.

X. MINERAL RESOURCES Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	No Impact
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	**X**
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	**X**

DISCUSSION

The California Division of Mines and Geology (now California Geologic Survey) and the State Mining and Geology Board are responsible for administering the mineral lands inventory process under the Surface Mining and Reclamation Act of 1975 (SMARA) (California Department of Conservation, 2008). Areas are classified on the basis of geologic factors, without regard to existing land use and land ownership. The areas are categorized into four Mineral Resource Zones (MRZs), and lands classified as MRZ-2 are of the greatest importance. Demonstrated mineral resources underlie such areas where geologic data indicate the presence of significant measured resources. The Mining and Geology Board designate MRZ-2 areas as "regionally significant" (CDC, 2008).

According to the City's General Plan Background Report, sand and gravel extraction operations are occurring along Cache Creek approximately 10 miles to the north, and other places in Yolo County, however no mining or quarrying operations currently exist in the Winters area. Most of the area is classified as MRZ-1 by the California Division of Mines, which means that no significant mineral deposits are present. Land classified as MRZ-1 is not affected by state policies pertaining to the maintenance of access to regionally significant mineral deposits under the California Surface Mining and Reclamation Act of 1975.

a-b) **No impact**. As mentioned above, no mining or quarrying operations currently exist in the Winters area and no mineral resource zone or locally important mineral recovery site would be impacted by the proposed project. Furthermore, according to the Division of Oil, Gas, and Geothermal Resources, Map 616, no oil, gas, or geothermal resources are located on the project site or in the project vicinity. The proposed project would not result in the loss of any known mineral resources. The project site is not designated as a mineral resource zone or locally

important mineral recovery site. The proposed project would not result in the loss of any known mineral resources.

XI. NOISE Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	No Impact
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	X	☐	☐
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	X	☐
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	X	☐	☐
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	X	☐	☐
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	X
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	X

DISCUSSION

The project site is an undeveloped riparian area, and the existing noise setting is characterized as relatively quiet. The only consistent noise source is distant roadway traffic noise emanating from I-505 and State Route 128. Intermittent noise from traffic on local county roads, in addition to noise from outdoor activities at nearby land uses (e.g., Creekside Bar, operation of landscaping and agricultural equipment, and aircraft overflight) also contribute, to a lesser extent, to the existing noise environment.

The nearest existing noise-sensitive uses is a residential neighborhood, which is located adjacent to the northern site boundary. The majority of the rest of the area surrounding the project site consists of agricultural farmland and orchards.

According to the City's General Plan, a noise level of 60 A-weighted decibels (dBA) community noise equivalent level (CNEL) is considered normally acceptable for Outdoor Public Facilities, such as is proposed by the project (City of Winters, 1992). In addition, the General Plan has established exterior noise level limits of 50 dBA between 7:00 a.m. and 10:00 p.m. for parks and recreation facilities, residential, and rural uses, wherein this noise level is not to be exceeded continuously during any five-minute period. If the noise level varies above and below the limit, the limit shall not be exceeded more than one time interval in any five-minute period. Exterior noise levels higher than the applicable limit plus 15 dBA are prohibited at all times. The applicable exterior nighttime (10:00 p.m. to 7:00 a.m.) noise performance standard for recreational and residential uses is 45 dBA, while that for rural land uses is 40 dBA (City of Winters, 1992).

The interior noise limit for residential structures is 45 dBA (City of Winters, 1992). The City's Zoning Code contains a provision, which limits noise levels from construction activities to 90 dB, as measured at 50 feet from a single piece of equipment, provided that activities are limited to the hours of 7:00 a.m. to 7:00 p.m. on weekdays. Activities on weekends and holidays are subject to the applicable standards at the receiving land use. The City Code also prohibits vibration levels above the threshold of perception for an individual at or beyond the property boundary of the source if on private property, or at 150 feet from the source if on a public space or public right-of-way (City of Winters, 2001). According to the Federal Transportation Administration (FTA), the normal vibration threshold with respect to human response is 80 vibration decibels [(VdB) referenced to 1 microinch per second (μin/sec) and based on the root mean square (RMS) velocity amplitude] (FTA, 2006).

a) **Less than significant with mitigation incorporated**. The project will result in the generation of short-term noise impacts associated with construction and maintenance. These impacts are discussed below, and mitigation measures are recommended, as necessary, to reduce the degree of potential impacts.

The proposed project would include the demolition of the percolation dam and construction of the trail system. Construction activities would include site grading, clearing, vegetation removal, excavation, blasting and jack hammering associated with the site preparation phase and percolation dam removal; in addition to other miscellaneous activities.

According to the U.S. EPA, the noise levels of primary concern are typically associated with the site preparation phase because of the on-site equipment used for clearing, grading, excavation, and demolition (U.S. EPA, 1971). Depending on the operations conducted, individual equipment noise levels can range from 79 to 91 dBA at 50 feet, as indicated in Table 3.

The exact number and type of on-site equipment required for the construction activities is not known at this time, but would be anticipated to include dozers, trucks, loaders, blasting equipment, excavators, and graders. The simultaneous operation of such on-site construction equipment could potentially result in worst-case noise levels of approximately 91 dBA at 50 feet from the project site, without feasible noise control (e.g., mufflers) in place.

Based on these equipment noise levels and assuming a noise attenuation rate of 6 dBA per doubling of distance from the source to receptor, exterior noise levels at nearby proposed sensitive receptors located at a nominal 30 m (100 ft) from the project construction areas could potentially exceed 85 dBA without noise control. Consequently, the temporary construction noise associated with on-site equipment could potentially expose sensitive receptors to noise levels in excess of the applicable City noise standards, and/or result in a noticeable increase (5 dBA) in ambient noise levels.

Table 3. Typical Equipment Noise Levels.

	Noise Level in dBA at 50 feet	
Type of Equipment	**Without Feasible Noise Control**	**With Feasible Noise Control[1]**
Loader	79	75
Dozer or tractor	80	75
Crane	83	75
Scraper	88	80
Excavator	88	75
Compactor	82	75
Backhoe	85	75
Grader	85	75
Generator	78	75
Truck	91	75

[1] U.S. EPA, 1971. Feasible noise control includes the use of intake mufflers, exhaust mufflers, and engine shrouds in accordance with manufacturers' specifications.

Implementation of the following mitigation measure would reduce potential impacts from construction noise to a less-than-significant level. Implementation of the required mitigation measure would not only avoid noise generation during the noise-sensitive nighttime hours, but also achieve consistency with the noise ordinance construction exemption criteria.

Mitigation Measure NOISE-1:
All construction activities shall be limited to the daytime hours between 7:00 a.m. and 7:00 p.m. on weekdays, and all construction equipment shall be properly fitted with mufflers and maintained in good working order.

Successful implementation of mitigation measure NOISE-1 would reduce noise levels at the nearest existing sensitive receptors (residential site approximately 100 feet to the north) to a maximum of 69 dBA. Limitation of construction operations to the less noise-sensitive hours of the day/week would prevent potential sleep disruption, and would be consistent with the provisions of the noise ordinance.

Mitigation Measure NOISE-2:
Park hours of operation, and landscaping and maintenance activities, shall be limited to the daytime hours between 7:00 a.m. and 10:00 p.m.

b) **Less than significant impact**. Construction activities have the potential to result in varying degrees of temporary groundborne vibration, depending on the specific construction equipment used and operations involved. Vibration generated by construction equipment spreads through the ground and diminishes in magnitude with increases in distance. Table 4 displays vibration levels for typical construction equipment.

As discussed above, specific on-site construction equipment required for park construction is not known at this time, but would be expected to include dozers, trucks, loaders, blasting equipment, excavators, and graders. According to FTA and as shown in Table 4, vibration levels associated with the use of large bulldozers are 0.089 in/sec peak particle velocity (PPV) and 87 VdB (referenced to 1 μin/sec and based on the RMS velocity amplitude) at 25 feet. Using FTA's recommended procedure for applying a propagation adjustment to these reference levels, predicted worst-case vibration levels of approximately 0.01 in/sec PPV and 75 VdB at the closest proposed noise-sensitive receptor to construction operations (approximately 100 feet away) could occur from use of large dozers. These vibration levels would not exceed Caltrans' recommended standard of 0.2 in/sec PPV (Caltrans 2002) with respect to the prevention of structural damage for normal buildings or FTA's vibration standard of 80 VdB (FTA, 2006) with respect to human annoyance for residential uses. The closest existing sensitive use is approximately 100 feet from the edge of the project site, and would be even less affected by any vibration. Finally, the long-term operation of the proposed project (i.e., use and maintenance of the proposed park facilities) would not include any substantial vibration sources.

Table 4. Typical Construction-Equipment Vibration Levels.

Equipment	PPV at 25 feet (in/sec)[1]	Approximate Lv at 25 feet[2]
Large bulldozer	0.089	87
Trucks	0.076	76
Jackhammer	0.035	79
Small bulldozer	0.003	58

FTA, 2006. [1] in/sec = inches per second; PPV = peak particle velocity. [2] Lv = velocity level in decibels (VdB) referenced to 1 microinch per second (μin/sec) and based on the root mean square (RMS) velocity amplitude.

Thus, implementation of the project would not result in the exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels.

c) **Less than significant with mitigation incorporated**. Refer to discussion in item a above.

d) **Less than significant with mitigation incorporated**. Refer to discussion in item a above.

e) **No impact**. The project site is not located within an airport land use plan, and is located over 2 miles from the nearest airport. The closest airport to the project site is the Yolo County Airport (FAA Site 01488), which is roughly 7 miles from the project site.

In addition there are no residences proposed as part of the project. Therefore, the project would not expose sensitive receptors to excessive air traffic noise.

f) **No impact**. The project site is not located within two miles of a private airstrip. In addition there are no residences proposed as part of the project. Therefore, the project would not expose sensitive receptors to excessive air traffic noise.

XII. POPULATION AND HOUSING Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	No Impact
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☐	**X**
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	**X**
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	**X**

DISCUSSION

a) **No impact**. The project does not intend to propose or develop new homes and business, or extend roads or other infrastructure.

b) **No impact**. No housing exists on-site. The project would not involve any displacement of housing or of people.

c) **No impact**. No housing exists on-site. The project would not involve any displacement of housing or of people.

XIII. PUBLIC SERVICES Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	No Impact
Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
a) Fire protection?	☐	**X**	☐	☐
b) Police protection?	☐	☐	**X**	☐
c) Schools?	☐	☐	☐	**X**
d) Parks?	☐	☐	☐	**X**
e) Other public facilities?	☐	☐	☐	**X**

DISCUSSION

a) **Less than significant with mitigation incorporated**. The City of Winters Fire Department provides primary fire protection service to the project site. This increase is expected to be negligible especially since visitors to the park are already served by emergency response.

From a technical standpoint, the proposed project will not have a significant effect on the provision of service, since it is not increasing the population served by the department. However, the recreational development of the site will have an incremental effect on fire protection services by adding structural improvements. It is imperative that fire fighting equipment and personnel have access to all areas on the site. Accordingly, the following mitigation measure is required:

Mitigation Measure PUB-1:
Emergency vehicle access, and fire flow, shall be in accordance with requirements of the City of Winters Fire Department.

b) **Less than significant impact**. The City of Winters Police Department provides primary police protection service. Since the park will not add to the resident population served by the

Police Department, the project will not significantly increase demand for police services. The eventual construction of park displays, the bridge, and other improvements will likely contain features that may be subject to vandalism or theft. These factors may result in a minor incremental increase in the Police Department's workload. Conversely, the project will improve the ability of police and sheriff observation of the area and access to the site, and increase use, which is typically associated with a reduction in crime.

c) **No impact**. The project site does not contain any residential services; therefore, it is not likely to contribute to the student population.

d) **No impact**. The project will not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities. It will not result in the need for new or physically altered governmental facilities.

e) **No impact**. The project does not involve any activity that would have a direct, or reasonably foreseeable indirect impact on libraries, museums, or other services not explicitly reviewed in this document.

XIV. RECREATION Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	No Impact
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	**X**
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?	☐	☐	**X**	☐

DISCUSSION

a) **No impact.** Primary recreational uses of the site include kayak/canoe trips, fishing, nature walks, birding, and swimming. The proposed project will improve access and safety for those uses, as well as enhance the area for use by park visitors.

b) **Less than significant impact**. The project does intend to expand the recreational facilities of the site by constructing a series of trails. However, the addition of trails in this area would benefit the environment by allowing access to establish native vegetation in the floodplain and through the removal of non-native invasive weeds.

XV. TRANSPORTATION/TRAFFIC Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	No Impact
a) Cause an increase in traffic, which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?	☐	☐	X	☐
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?	☐	☐	☐	X
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☐	X
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	X
e) Result in inadequate emergency access?	☐	☐	☐	X
f) Result in inadequate parking capacity?	☐	X	☐	☐
g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	☐	☐	☐	X

DISCUSSION

a) **Less than significant impact**. The project is not intended to increase traffic. The site is considered a local feature and there will be no significant additional parking created.

b) **No impact**. The project will not exceed a level of service standard established by the City or Solano County for designated roads or highways.

c) **No impact**. The project site is not located near an airport and it does not include any improvements to airports or change in air traffic patterns.

d) **No impact**. Streets in the vicinity have been designed to safely and efficiently accommodate all proposed local land uses, including the existing park. Future developments beginning

construction in proximity to the project site have included mitigation measures that will alleviate potential impacts caused by their associated increased trips in the area. There are no incompatible uses in the vicinity that would cause additional traffic hazards.

e) **No impact**. Currently there is limited access for emergency vehicles into the park area. The planned roadway connections and extensions in the project vicinity would have beneficial effects for emergency access.

f) **Less than significant with mitigation incorporated**. The draft Plan has identified three possible trailheads on Putah Creek Road. The first is at the trestle bridge. When the new car bridge is built, a portion of Putah Creek Road will be realigned, and it appears that with this realignment is it possible to provide limited vehicle parking up to (five vehicles) near this bike trail. The second location, and the most problematic, is the proposed main southern trailhead entry into the Putah Creek Flats section. Currently, there is a widened area that can accommodate up to 11 parallel parking spaces along the road edge. This would also be the likely area where school buses for field trips would unload, but not park. The third location for parking is at the east end of the park, adjacent to I-505. There is also a long, wide area that can accommodate up to eight vehicles. This is also a possible location for the future pedestrian bridge. Given the limited space, it is critical that the Putah Creek Road width be resolved before this access route and parking are developed. If additional land is acquired as part of relocating Putah Creek Road, then parking locations and numbers can be better arranged to meet specific needs.

Mitigation Measure TT-1:
Roadway width and ingress-egress standards for access must be developed and implemented with Solano Transportation Authority before these routes can be developed.

g) **No impact**. The project would not conflict with adopted policies, plans, or programs supporting alternative transportation. The park will be accessible via pedestrian and bicycle route connections.

XVI. UTILITIES AND SERVICE SYSTEMS Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	No Impact
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	X	☐
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	X
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	X
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	X	☐
e) Result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	X	☐
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	X	☐
g) Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☐	X

DISCUSSION

a) **Less than significant impact**. The proposed project restroom will generate minimal amounts of wastewater in need of treatment that can be accommodated by existing facilities. The restroom design would most likely involve either permanent installation on the upper bank or a temporary, seasonal installation on the higher terrace. The park use is not expected to result in unusual wastewater exceeding wastewater treatment requirements of CVRWQCB.

b) **No impact**. The project does not propose to require or intend to result in the construction of new water or wastewater treatment facilities or the expansion of existing facilities.

c) **No impact**. The project does not propose to require or intend to result in the construction of new storm water drainage facilities or the expansion of existing facilities.

d) **Less than significant impact**. The project does not require any water supplies, other than for short-term vegetation irrigation and that which is necessary for any proposed restrooms and drinking fountains.

e) **Less than significant impact**. No wastewater treatment is required as a result of this project. Wastewater produced from any restrooms is likely to be pumped or vacuumed and transported off-site to the Yolo County Central Landfill.

f) **Less than significant impact**. The project would potentially generate limited amounts of solid waste from visitors. Solid waste from the project site would be collected by the City and disposed of at the Yolo County Central Landfill, a 722-acre facility. The landfill has a capacity of 11 million tons with capacity for planned growth through 2025.

g) **No impact**. The California Integrated Solid Waste Act of 1989 (Assembly Bill 939) mandates requirements regarding solid waste management, reduction, and recycling. The City is required to comply with these mandates. Therefore, the proposed project would comply with all relevant federal, state, and local statutes and regulations related to solid waste.

XVII. MANDATORY FINDINGS OF SIGNIFICANCE

NOTE: If there are significant environmental impacts which cannot be mitigated and no feasible project alternatives are available, then complete the mandatory findings of significance and attach to this initial study as an appendix.

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	No Impact
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☐	**X**	☐
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☐	☐	**X**
c) Does the project have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☐	**X**

DISCUSSION

a) **Less than significant impact**. The proposed project, as mitigated, will have temporary effects on the riparian forest. There may be temporary displacement of some animal species, but no take of any special status species or habitat will occur. The project will remove the Winters percolation dam, allowing a free-flowing creek, and improving movement of aquatic organisms. The floodplain will be revegetated with native species and will actually increase the amount of available habitat for terrestrial species and eliminate the potential as a fish passage barrier, thereby reversing any temporary construction effects of the project (refer to all Mitigation Measures in the Biological Resources section).

b) **No impact**. The Lower Putah Creek Coordinating Committee has several planned projects for 2008 and continuous ongoing creek maintenance activities. The I-505 Project proposes to repair damage to native vegetation caused by off-road vehicles and also add gravel to the creek. The

proposed project integrates those activities to ensure more effective implementation and the reduction of potential direct and indirect impacts.

c) **No impact**. The project does not have environmental effects that will cause substantial adverse effects on humans, either directly or indirectly. All potentially significant environmental effects have been mitigated.

WINTERS PUTAH CREEK NATURE PARK / FLOODPLAIN RESTORATION AND RECREATIONAL ACCESS PROJECT
MITIGATION, REPORTING AND MONITORING PLAN

The California Environmental Quality Act requires public agencies to report on and monitor measures adopted as part of the environmental review process (Section 21081.6, Public Resources Code [PRC]; Section 15097 of the CEQA Guidelines). This Mitigation Monitoring Plan (MMP) is designed to ensure that the measures identified in the Mitigated Negative Declaration are fully implemented. The MMP describes the actions that must take place as a part of each measure, the timing of these actions, the entity responsible for implementation, and the agency responsible for enforcing each action.

The City has the ultimate responsibility to oversee implementation of this Plan. The Community Development Director serves as the Project Monitor responsible for assigning monitoring actions to responsible agencies. As required by Section 21081.6 of the PRC, the Winters Community Development Department is the "custodian of documents and other material" which constitute the "record of proceedings" upon which a decision to approve the proposed project was based. Inquiries should be directed to:

Community Development Director
City of Winters
530-795-4910 x 112

The location of this information is:

Winters City Hall
Community Development Department
318 First Street
Winters, California 95694

In order to assist implementation of the mitigation measures, the MMP includes the following information:

Mitigation Measure: The mitigation measures are taken verbatim from the Negative Declaration.

Timing/Milestone: This section specifies the point by which the measure must be completed. Each action must take place during or prior to some part of the project development or approval.

Responsibility for Oversight: The City has responsibility for implementation of most mitigation measures. This section indicates which entity will oversee implementation of the measure, conduct the actual monitoring and reporting, and take corrective actions when a measure has not been properly implemented.

Implementation of Mitigation Measure: This section identifies how actions will be implemented and verified.

Responsibility for Implementation: This section identifies the entity that will undertake the required action.

Check off Date/Initials: This verifies that each mitigation measure has been implemented.

Pursuant to Section 18.04.090 of the Winters Municipal Code related to the required CEQA Mitigation Monitoring Plan, sign-off on the completion of each mitigation measure in the adopted Mitigation Monitoring Plan (MMP) shall constitute the required "Program Completion Certificate".

The Mitigation Monitoring Plan shall be adopted pursuant to the requirements of Section 18.04.060.A and implemented pursuant to Section 18.04.070.A - E, of the Winters Municipal Code.

MITIGATION, REPORTING, AND MONITORING PROGRAM

Mitigation Measure	Summary of Measure	Timing/Milestone	Responsibility for Oversight	Implementation of Mitigation Measure	Responsibility for Implementation	Checkoff Date/Initials
Mitigation Measure AQ-1	i. *To the extent that equipment and technology is available, the contractor shall use State of California (CARB) certified catalyst and filtration technologies.* ii. *All construction diesel engines, which have a rating of 50 hp or more, shall meet the Tier-2 California Emission Standards for off-road compression-ignition engines, unless otherwise certified by the Air District's Air Quality Construction Mitigation Monitor (AQCMM). In the event that a Tier II engine is not available, Tier I compliant or 1996 or newer engines will be used preferentially. Older engines will only be used if the AQCMM certifies that compliance is not feasible.* iii. *Project sequencing is specifically designed to reduce air impacts from the operation of the heavy equipment. Wait times for*	Prior to and during grading, and during appropriate period of construction.	Yolo-Solano Air Quality Management District	The Project Proponent shall satisfy the terms of the measure. Evidence of this shall be provided to the City.	Project Proponent	

Mitigation Measure	Summary of Measure	Timing/Milestone	Responsibility for Oversight	Implementation of Mitigation Measure	Responsibility for Implementation	Checkoff Date/Initials
Mitigation Measure AQ-1 (cont'd)	*dump trucks and idle time shall be minimized to 5 minutes or less.*					
	iv. *All disturbed areas, which are not being actively utilized for construction purposes, shall manage dust emissions using water, vegetative ground cover or other acceptable dust management practices.* v. *All bare ground will have ground cover replaced as soon as practicable.* vi. *Heavy-duty diesel equipment will be maintained in optimum running condition.*					
Mitigation Measure BR-1	*The pond turtle will be protected from site staging and operations areas through the use of fencing, a Worker Environmental Awareness Program (WEAP), and daily monitoring by a qualified biologist. The site will be*	Not more than 30 days prior to commencement of grading or any physical modification of undeveloped portions of the site.	City of Winters	The Project Proponent shall coordinate with the appropriate agency(s) to satisfy the terms of the measure. Evidence of this shall be provided to the City. The survey shall	Project Proponent	

Mitigation Measure	Summary of Measure	Timing/Milestone	Responsibility for Oversight	Implementation of Mitigation Measure	Responsibility for Implementation	Checkoff Date/Initials
Mitigation Measure BR-1 (cont'd)	*inspected daily for the presence of turtles and netting or other barriers will be used when necessary to trap the turtles and move them to an area outside of the construction activity.*			be performed by a qualified biologist in accordance with accepted protocols.		
Mitigation Measure BR-2	*If construction occurs during the breeding season (March-September 15), the Project Proponent shall conduct pre-construction surveys no more than 14 days and no less than 7 days prior to initiating construction. A qualified biologist shall conduct the surveys and the surveys shall be submitted to the City for review. The survey area shall include all potential nesting sites located within 0.8 km (½ mi) of the project site. If no active nests are found during the surveys, no further mitigation shall be required except with regard to foraging habitat.* *If an active nest used by a*	Not more than 30 days prior to commencement of grading or any physical modification of the site.	City of Winters	The Project Proponent shall coordinate with the appropriate agency(s) to satisfy the terms of the measure. Evidence of this shall be provided to the City. The survey shall be performed by a qualified biologist in accordance with accepted protocols.	Project Proponent	

Mitigation Measure	Summary of Measure	Timing/Milestone	Responsibility for Oversight	Implementation of Mitigation Measure	Responsibility for Implementation	Checkoff Date/Initials
Mitigation Measure BR-2 (cont'd)	*Swainson's hawk is found sufficiently close to the construction area, a qualified biologist shall notify the CDFG. No intensive new disturbances (e.g. heavy equipment operation associated with construction, use of cranes or draglines, new rock crushing activities) or other project related activities which may cause nest abandonment or forced fledging, should be initiated within 0.4 km (¼ mi) (buffer zone) of an active nest between March 1- September 15 or until August 15 if a Management Authorization or Biological Opinion is obtained for the project. If construction or other project related activities, which may cause nest abandonment or forced fledging, are necessary within the buffer zone, monitoring of the nest site by a qualified biologist should be required. Routine disturbances such as agricultural activities, commuter traffic, and routine*					

Mitigation Measure	Summary of Measure	Timing/Milestone	Responsibility for Oversight	Implementation of Mitigation Measure	Responsibility for Implementation	Checkoff Date/Initials
Mitigation Measure BR-2 (cont'd)	*facility maintenance activities within 0.4 km (¼ mi) of an active nest should not be prohibited (CDFG, 1994b).*					
Mitigation Measure BR-3	*Prior to land disturbance activities, the observed elderberry shrubs shall be identified, mapped, flagged, and be protected by orange temporary fencing for the duration of the project earthmoving activities. Complete avoidance (i.e., no adverse effects) may be assumed when a 30 m (100 ft) (or wider) buffer is established and maintained around elderberry plants containing stems 2.5 cm (1.0 in) or greater in diameter at ground level. In the event that work must proceed in areas where encroachment on the 30 m (100 ft) buffer has been approved by the USFWS, a minimum setback of at least 6 m (20ft) from the dripline of each elderberry plant shall be provided. Signs will be erected every 15 m (50 ft) along the edge of*	Not more than 30 days prior to commencement of grading or any physical modification of the site.	City of Winters	The Project Proponent shall coordinate with the appropriate agency(s) to satisfy the terms of the measure. Evidence of this shall be provided to the City. The survey shall be performed by a qualified botanist in accordance with accepted protocols.	Project Proponent	

Mitigation Measure	Summary of Measure	Timing/Milestone	Responsibility for Oversight	Implementation of Mitigation Measure	Responsibility for Implementation	Checkoff Date/Initials
Mitigation Measure BR-3 (cont'd)	*the avoidance area with the following information: "This area is habitat of the valley elderberry longhorn beetle, a threatened species, and must not be disturbed. This species is protected by the Endangered Species Act of 1973, as amended. Violators are subject to prosecution, fines, and imprisonment."(USFWS, 1999).*					
Mitigation Measure BR-4	*A pre-construction survey will be completed to ensure that Baker's navarretia is identified and if it does occur, it will be marked and avoided, and if necessary removed, with CDFG permission.*	Not more than 30 days prior to commencement of grading or any physical modification of the site.	City of Winters	The Project Proponent shall coordinate with the appropriate agency(s) to satisfy the terms of the measure. Evidence of this shall be provided to the City. The survey shall be performed by a qualified botanist in accordance with accepted protocols.	Project Proponent	
Mitigation Measure BR-5	*Prior to any grading activities onsite, the project proponent shall:*	Prior to commencement of grading or any physical	City of Winters	The Project Proponent shall coordinate with the appropriate agency(s) to satisfy the	Project Proponent	

Mitigation Measure	Summary of Measure	Timing/Milestone	Responsibility for Oversight	Implementation of Mitigation Measure	Responsibility for Implementation	Checkoff Date/Initials
Mitigation Measure BR-5 (cont'd)	*1.) Submit the Initiation Package to the USACE, USEPA, USFWS and CDFG review team for consideration on the 404(d) Permit application process, for a Section 7 consultation and possible Take Permit.* *All native fish species will be protected either by timing the in-stream activities outside of the movement and breeding seasons, or through displacement and temporary dewatering. The final mitigation elements will be developed in consultation with the USFWS and CDFG. The potential for indirect impacts will be mitigated for by sediment control activities under the SWPPP.*	modification of the site.		terms of the measure. Evidence of this shall be provided to the City. The survey and monitoring shall be performed by a qualified biologist in accordance with accepted protocols.		
Mitigation Measure BR-6	*Prior to the commencement of grading or construction activities onsite, the Project Proponent shall comply with all of the following:* *1.) Obtain and comply with a California Department of*	Prior to commencement of grading or any physical modification of the site.	City of Winters	The Project Proponent shall coordinate with the appropriate agency(s) to satisfy the terms of the measure. Evidence of this shall be provided to the City.	Project Proponent	

Mitigation Measure	Summary of Measure	Timing/Milestone	Responsibility for Oversight	Implementation of Mitigation Measure	Responsibility for Implementation	Checkoff Date/Initials
Mitigation Measure BR-6 (cont'd)	*Fish & Game, Streambed Alteration Agreement in accordance with Sections 1600-1616 of the California Fish & Game Code, as required.* *2.) Obtain and comply with the provisions of a SWPPP permit from the California Regional Water Quality Control Board. Construction cannot be started until the SWPPP is issued.* *3.) Establish native grass and accelerate riparian transplanting for cover.*					
Mitigation Measure BR-7	*Prior to the commencement of grading or construction activities onsite, the Project Proponent shall comply with all of the following:* *1). Obtain an Individual USACE 404(d) permit.* *2). Implement a mitigation plan for replacement (creation, restoration, and*	Prior to commencement of grading or any physical modification of the site.	City of Winters	The Project Proponent shall coordinate with the appropriate agency(s) to satisfy the terms of the measure. Evidence of this shall be provided to the City.	Project Proponent	

Mitigation Measure	Summary of Measure	Timing/Milestone	Responsibility for Oversight	Implementation of Mitigation Measure	Responsibility for Implementation	Checkoff Date/Initials
Mitigation Measure BR-7 (cont'd)	*preservation) of impacted seasonal wetlands within the floodplain, subject to USACE approval.*					
Mitigation Measure CR-1	*Should previously undisclosed archaeological resources be found, the following procedures would be applied. Any locally darkened sediments, concentrations of chipped stone especially obsidian and flint, any shaped stone, circular pits in bedrock, and/or concentrations of bone or shell are found, all work in the immediate vicinity of the find(s) shall cease until a qualified archaeologist can be retained to evaluate the find(s) and make recommendations as necessary. If human remains or bones of any type are found, the stipulations set forth in Section 15064.5 of the CEQA Guidelines (formerly included in Appendix K of the CEQA Guidelines) shall be followed.*	During site development	City of Winters; Yolo County Coroner; State Native American Heritage	If human remains are found, all grading and activity in the immediate area shall cease, the find shall be left in place, and the Project Proponent shall immediately notify the Yolo County Coroner at (530) 666-8282, the Community Development Department at (530) 795-4910 x 114, to assess the find and determine how to proceed. If the remains are found to be of Native American descent, the Native American Heritage Commission shall also be notified at (916) 653-4082, pursuant to the terms of the measure.	Project Proponent	

Mitigation Measure	Summary of Measure	Timing/Milestone	Responsibility for Oversight	Implementation of Mitigation Measure	Responsibility for Implementation	Checkoff Date/Initials
Mitigation Measure CR-1 (cont'd)	*Work shall cease in the area of the find(s) until qualified individuals (County Coroner by law, in practice a qualified archaeologist or forensic anthropologist working with the local Indian community) have determined that the bone is human and archaeological in nature. If the bone is human and archaeological, the project proponent shall follow the procedures indicated in the California Public Resources Code as they relate to the discovery of human remains. The above noted procedures shall be included within the project plan and shall be employed during project construction, thereby incorporated as part of the project description.*					

Mitigation Measure	Summary of Measure	Timing/Milestone	Responsibility for Oversight	Implementation of Mitigation Measure	Responsibility for Implementation	Checkoff Date/Initials
Mitigation Measure HHM-1	i. During construction, operation, and maintenance of the project, all equipment operating with an internal combustion engine shall be equipped with federally approved spark arresters. Spark arresters are not required on trucks, buses, and passenger vehicles (excluding motorcycles) that are equipped with an unaltered muffler or on diesel engines equipped with a turbocharger. ii. Operating or using any internal combustion engine, on any timber, brush, or grass covered land, including trails and roads traversing such land, without a spark arrester, maintained in effective working order, meeting either (I) Department of Agriculture, Forest Service standard 5100, "SPARK ARRESTERS FOR INTERNAL COMBUSTION ENGINES," (current edition); or (II) the Society of Automotive Engineers (SAE) recommended Practices J335,	During construction, operation and maintenance of the project and park.	City of Winters	The Project Proponent shall satisfy the terms of the measure. Evidence of this shall be provided to the City.	Project Proponent	

Mitigation Measure	Summary of Measure	Timing/Milestone	Responsibility for Oversight	Implementation of Mitigation Measure	Responsibility for Implementation	Checkoff Date/Initials
Mitigation Measure HHM-1 (cont'd)	"MULTIPOSITION SMALL ENGINE EXHAUST SYSTEM FIRE IGNITION SUPPRESSION," (current revision) and J350, 36 CFR 261.52(j), is prohibited. iii. Passenger carrying vehicles, pickups, and medium and large highway trucks (80,000 Gross Vehicle Weight) will be equipped with a factory designed muffler system that is specified for the make and model of the respective vehicle/truck or with a muffler system that is equivalent to or exceeds factory specifications. iv. Exhaust systems shall be properly installed and continually maintained in serviceable condition. v. While in use, each internal combustion engine including tractors, trucks, yarders, loaders, welders, generators, stationary engines, or comparable powered					

Mitigation Measure	Summary of Measure	Timing/Milestone	Responsibility for Oversight	Implementation of Mitigation Measure	Responsibility for Implementation	Checkoff Date/Initials
Mitigation Measure HHM-1 (cont'd)	equipment will be provided with at least the following: a. One fire extinguisher, at least 5#ABC with an Underwriters Laboratory (UL) rating of 3A 40BC, or greater. b. One shovel, sharp, size O or larger, roundpointed with an overall length of at least 48 inches. c. One axe, sharp, double bit 31/2#, or one sharp pulaski. d. Extinguishers, shovels, axes, and pulaskis shall be mounted so as to be readily available from the ground. All tools shall be maintained in a serviceable condition.					
Mitigation Measure NOISE-1	*All construction activities shall be limited to the daytime hours between 7:00 a.m. and 7:00 p.m. on weekdays, and all construction equipment shall be properly fitted with mufflers and maintained in good working order.*	Prior to commencement of grading or any physical modification of the site.	City of Winters	The Project Proponent shall satisfy the terms of the measure. Recommendations of the noise analysis to comply with measure shall be implemented by the Project Proponent.	Project Proponent	

Mitigation Measure	Summary of Measure	Timing/Milestone	Responsibility for Oversight	Implementation of Mitigation Measure	Responsibility for Implementation	Checkoff Date/Initials
Mitigation Measure NOISE-1 (cont'd)	*Successful implementation of mitigation measure NOISE-1 would reduce noise levels at the nearest existing sensitive receptors (residential site approximately 100 feet to the north) to a maximum of 69 dBA. Limitation of construction operations to the less noise-sensitive hours of the day/week would prevent potential sleep disruption, and would be consistent with the provisions of the noise ordinance.*					
Mitigation Measure NOISE-2	*Construction hours of operation and landscaping and maintenance activities shall be limited to the daytime hours between 7:00 a.m. and 10:00 p.m.*	During construction, operation and maintenance of the project and park.	City of Winters	The Project Proponent shall satisfy the terms of the measure. Evidence of this shall be provided to the City.	Project Proponent	
Mitigation Measure PUB-1	*Emergency vehicle access, and fire flow, shall be in accordance with requirements of the City of Winters Fire Department.*	Initial consultation prior to plan development.	City of Winters	The Project Proponent shall satisfy the terms of the measure. Evidence of this shall be provided to the City.	Project Proponent	

Mitigation Measure	Summary of Measure	Timing/Milestone	Responsibility for Oversight	Implementation of Mitigation Measure	Responsibility for Implementation	Checkoff Date/Initials
Mitigation Measure TT-1	*Roadway width and ingress-egress standards for access must be developed and implemented with Solano Transportation Authority before these routes can be developed.*	As specified by the City Engineer as determined by the project schedule.	City of Winters	The Project Proponent shall satisfy the terms of the measure. Evidence of this shall be provided to the City.	Project Proponent	

LIST OF PREPARERS

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APPENDIX A
Vegetation Management Plan

APPENDIX B
Winters Putah Creek Nature Park Accepted Conceptual Master Plan

APPENDIX C
City of Winters Habitat Mitigation Program

APPENDIX D
Draft Cultural Resource Investigation for the Solano County, California Winters Putah Creek Park Percolation Dam Removal and Floodplain Restoration Project